

Miscellaneous notes on the pterygot insects of Kato Mountains with illustrations their spring aspects (South East Turkey)

Muhabbet Kemal Ahmet Ömer Koçak

Abstract: Miscellaneous notes on the pterygot insects of Kato Mountains with illustrations their spring aspects (South East Turkey). *Cesa News* 57: 1-67, 107 figures, 1 map.

In this paper, faunistical, ecological, biological and ethological notes on the spring insects of Kato Mountains (South East Turkey) are given. Importance and difficulties of the Kato Mountains are briefly explained. Previous collections made by the authors are evaluated here and their faunistical lists are given here for the first time. Stray notes on the excursions made in April to western slopes of Kato in Siirt Province are given with illustrations.

Key words: Fauna, ecology, biology, ethology, list, Turkey, Van, Siirt, Kato, insect, pterygota.

Kato, a special and currently impassable mountain, laying in South East Turkey (Van, Siirt, and Şırnak provinces) with an elevation over 3000m above sea level (**map 1, figs.1-3,4,8-11**). Its biodiversity is still unknown, as it can not be explored in the last three decades due to the very high activities of the terrorism (**fig.5**). Although this situation didnt change today, an attempt on the exploring entomofauna of Kato Mountains was made by the authors. The results of the previous visitings, carried out by the authors within last years are compiled here for this purpose. Western steep slopes of Kato, situated in the east of the district Pervari (Siirt Province) visited by the authors in this spring. The weather conditions were not so friendly (**fig. 1**). However, after a rapid evaluation of the observations, the results were found noteworthy. Therefore, the authors came to the conclusion that a project on the Entomofauna of Kato Mountains will be of particular interest to academic circle.



Map 1 - Kato, laying at South- western most of Van Province, and also eastern Siirt Province (South East Turkey). Its border is marked approximately with orange.



Fig. 1 - Kato, western slopes in a rainy day of April 2010, Siirt Province. 10 4 2010, Photo M. Kemal (Cesa)

In this article, some of the specimens collected by the authors previously and preserved currently in the Cesa collection are evaluated below.

In the first part, list of 202 lepidopterous species of 22 families are given.

In the second part, 59 species of 6 pterygot orders (*Orthoptera*, *Hemiptera*, *Neuroptera*, *Diptera*, *Hymenoptera* and *Coleoptera*) are listed. In this manner, totally 261 pterygot species of Kato Mountain are mentioned.

The results of the latest excursions by the authors are given in the third part. Here, the topography, plant covers, studying conditions, as well as the collecting and observing methods of the authors (**figs. 6,7,12-17**) are briefly narrated in a special way with numerous original illustrations. In this part various species were observed and photographed in the studied area, belong to 9 pterygot orders, i.e., *Orthoptera* (**figs. 18-20**), *Dermaptera* (**figs. 12, 22**), *Hemiptera* (**figs. 23-33**), *Homoptera* (**fig. 34**), *Neuroptera* (**figs. 35-37**), *Diptera* (**figs. 38-51**), *Lepidoptera* (**figs. 52-71**), *Hymenoptera* (**figs. 72-85**) and *Coleoptera* (**figs. 86-102**). An ethological observation is also made in the studied area (**figs. 103-107**).

I - List of the Lepidoptera recorded previously in Kato Mountains

The following synonymous list of 202 species is based upon literary data as well as info-system of the Cesa. The northern slopes of Kato Mts. (Atlıhan, Büyükağaç, Övecek, Dalbastı, Narlı, Konalga, between 1200-2000m) visited by the authors several times between the years 2001 and 2005. The lepidopteran specimens (22 families) were identified partly. Some information obtained have been published by the authors in various articles (Kemal & Koçak, 2007; Koçak & Kemal, 2002, 2007). From the Cesa collection, unpublished collecting information of the authors for some species are also added under the related families.

(Butterflies)

Papilionidae

Iphiclides podalirius 1♂ Çatak: Atlıhan, 1200m. 17 05 2003 (Rocky stony mountain slope covered by degraded mixed forest (*Quercus*, *Celtis*, *Prunus*, *Crataegus*) with degraded malacophyllous plants and grasses). - ***Parnassius (Driopa) mnemosyne*** 2♂ 1♀ Çatak: Narlı, Övecek, 1400m. 26 05 2001. - (in obs.). Çatak: Dalbastı meşeliği, 1650m. 07 06 2003. - 13♂ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. - ***Zerynthia (Allancastris) deyrollei*** 1♂ Çatak: Dalbastı meşeliği, 1650m. 07 06 2003. - 4♂ 1♀ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001.

1. ***Iphiclides podalirius* (Linnaeus, 1758)** *podalirius* Linnaeus, 1758; *sinon* Poda, 1761; *flammeus* Fourcroy, 1785; *brassicae* Fabricius, 1807; *inalpinus* Verity, 1911; *valesiaca* Verity, 1911; *zancleides* Verity, 1911; *pseudopersica* Rocci, 1926.
2. ***Parnassius (Driopa) mnemosyne* (Linnaeus, 1758)** *mnemosyne* Linnaeus, 1758
3. ***Archon apollinaris* (Staudinger, [1892])** *apollinaris* Staudinger, [1892]
4. ***Zerynthia (Allancastris) deyrollei* (Oberthür, 1869)** *deyrollei* Oberthür, 1869; *eisneri* Bernardi, 1970; *lycaoniae* Eisner & Wagnier, 1974; *#flavomaculata* Verity, 1905; *#ochracea* Verity, 1905; *#obscurior* Verity, 1905; *#subflava* Schultz, 1908; *#deflexa* Schultz, 1908; *#charis* Schultz, 1908; *#separata* Sheljuzhko, 1927.

Pieridae

Anthocharis cardamines 2♂ Çatak: Dalbastı 3km S, 1300m. 17 05 2003. - 5♂ 4♀ Çatak: Dalbastı 3km S, 1300m, 30 04 2005. - 9♂ Çatak: Dalbastı 3km S, 1300m. 04 05 2003. - ***Aporia crataegi*** (in obs.). Çatak: Dalbastı meşeliği, 1650m. 07 06 2003. - 1♂ Çatak: Atlıhan, 1200m. 19 06 2002. - 1♂ Çatak: Dalbastı 3km S, 1300m. 30 05 2003 (butterflies feed on *Rosa canina*, *Colutea cilicica*, *Cardaria draba*). - 2 larvae (video). Çatak: Dalbastı 3km S, 1300m, 30 04 2005. - 3 larvae from Çatak: Dalbastı 3km S, 1300m. 17 05 2003. Larvae on *Crataegus monogyna* (Rosaceae). - 4♂ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - ***Colias crocea*** 1♀ Çatak: Dalbastı 3km S, 1300m, 30 04 2005. - (observed) Çatak: Atlıhan, 1200m. 19 06 2002 (Butterfly feeds on *Knautia* sp.). - 1♀ Çatak: Dalbastı 3km S, 1300m. 17 05 2003 (Hilly place covered by mixed forest (*Quercus*, *Crataegus*, *Prunus*, *Acer*, *Celtis*), with malacophyllous plants and grasses). - 1♀ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. - ***Gonepteryx rhamni*** 1♂ Çatak: Dalbastı 3km S, 1300m, 30 04 2005. - ***Leptidea duponcheli*** 1♂ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. - ***Pieris ergane*** 1♂ 1♀ Çatak: Dalbastı 3km S, 1300m, 30 04 2005. - ***Pieris pseudorapae*** 1♀ Çatak: Dalbastı 3km S, 1300m, 30 04 2005. - ***Pontia edusa*** 2♂ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - ***Zegris eupheme*** 1♀ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001.

5. ***Anthocharis cardamines* (Linnaeus, 1758)** *cardamines* Linnaeus, 1758; *hesperides* Newman, 1894; *britannica* Verity, 1908; *meridionalis* Verity, 1908 nec Lederer, 1852; *montivaga* Turati & Verity, 1911
6. ***Anthocharis damone* Boisduval, 1836** *damone* Boisduval, 1836

7. **Anthocharis gruneri** Herrich-Schäffer,[1851] *gruneri* Herrich-Schäffer,[1851]; *#diluta* Röber,1907; *eros* Röber,1907
8. **Aporia (s.str.) crataegi** (Linnaeus,1758) *crataegi* Linnaeus,1758; *nigronevrosus* Retzius,1783; *minor* Verity,1907; *basanius* Fruhstorfer,1910; *crataegiaugusta* Verity,1937.
9. **Colias (Eriocolias) crocea** (Fourcroy,1785) *crocea* Fourcroy,1785; *pyrenaica* Groum-Grshimailo,1893.
10. **Gonepteryx (s.str.) rhamni** (Linnaeus,1758) *rhamni* Linnaeus,1758; *gravesi* Huggins,1956.
11. **Leptidea duponcheli** (Staudinger,1871) *duponcheli* Staudinger,1871; *#dupncheli* Nazari,2003
12. **Pontia edusa** (Fabricius,1777) *edusa* Fabricius,1777; *bellidice* Ochsenheimer,1808; *persica* Bienert,1869; *#nitida* Verity,[1908].
13. **Zegris eupheme** (Esper,[1804]) *eupheme* Esper,[1804]; *erother* Eversmann,1832; *tshudica* Herrich-Schäffer,[1851].

Argynnididae

Argynnis (Fabriciana) niobe 1♂ Çatak: Büyükağaç, 1400m. 19 06 2002 (Species inhabit in the openings of Quercus-Paliurus woodlands).- **Cynthia cardui** 1♂ Çatak: Dalbastı 3km S, 1300m, 30 04 2005- 1♂ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. - **Euapatura mirza** 5 larvae from Çatak: Atlıhan, 1200m. 17 05 2003 (Rocky stony mountain slope covered by degraded mixed forest (Quercus, Celtis, Prunus, Crataegus) with degraded malacophyllous plants and grasses. Larvae feed on Celtis glabrata (Ulmaceae)).- **Melitaea arduinna** 3 larvae from Çatak: Dalbastı 3km S, 1300m. 17 05 2003 (Hilly place covered by mixed forest (Quercus, Crataegus, Prunus, Acer, Celtis), with malacophyllous plants and grasses. Larvae on Centaurea behen). - **Melitaea collina lokmani** 2♂ Çatak: Dalbastı 3km S, 1300m. 30 05 2003. - **Melitaea didyma** (observed) Çatak: Atlıhan, 1200m. 19 06 2002. Butterfly feeds on Salvia sp. - **Nymphalis polychloros** >10 larvae from Çatak: Atlıhan, 1200m. 17 05 2003 (Rocky stony mountain slope covered by degraded mixed forest (Quercus, Celtis, Prunus, Crataegus) with degraded malacophyllous plants and grasses. Larvae feed on Ulmus sp.). - 1♀ Çatak: Dalbastı 3km S, 1300m. 17 05 2003 (Hilly place covered by mixed forest (Quercus, Crataegus, Prunus, Acer, Celtis), with malacophyllous plants and grasses). - 1♂ Çatak: Dalbastı 3km S, 1300m, 30 04 2005. - **Polygonia egea** 3♂ Çatak: Atlıhan, 1200m. 17 05 2003 (Rocky stony mountain slope covered by degraded mixed forest (Quercus, Celtis, Prunus, Crataegus) with degraded malacophyllous plants and grasses). - **Thaleropsis ionia** 2♂ 1♀ Çatak: Atlıhan, 1200m. 17 05 2003 (Rocky stony mountain slope covered by degraded mixed forest (Quercus, Celtis, Prunus, Crataegus) with degraded malacophyllous plants and grasses).

14. **Argynnis (Fabriciana) niobe** (Linnaeus,1758) *niobe* Linnaeus,1758.
15. **Vanessa (Cynthia) cardui** (Linnaeus,1758) *cardui* Linnaeus,1758; *carduelis* Cramer,1775; *elymi* Rambur,1829; *kershawi* McCoy,1868; *pallida* Schoyen,1881; *universa* Verity,1919; *takesakiana* Kato,1925.
16. **Euapatura mirza** Ebert,1971 *mirza* Ebert,1971; *iwasei* Igarashi,1971.
17. **Issoria lathonia** (Linnaeus,1758) *lathonia* Linnaeus,1758; *saturata* Röber,1897; *hungarica* Aigner-Abafi,1906; *florens* Verity,1916; *emiflorens* Verity,1919; *attenuata* Sagarra,1926; *nigroprivata* Verity,1933.
18. **Melitaea (Cinclidia) collina** Lederer,1861 *collina* Lederer,1861
19. **Melitaea (Didymaeformis) didyma** (Esper,[1779]) *didyma* Esper,[1779]; *armoricana* Oberthür,1909.
20. **Melitaea (s.str.) arduinna** (Fabricius,1787) *arduinna* Fabricius,1787; *rhodopensis* Freyer,[1836]; *uralensis* Eversmann,1844.
21. **Nymphalis polychloros** (Linnaeus,1758) *polychloros* Linnaeus,1758; *testudo* Esper,1781; *pyrrhomelaena* Hübner,1824; *pyromelas* Freyer,1834; *fervida* Standfuss,1896.
22. **Polygonia (Comma) egea** (Cramer,[1775]) *egea* Cramer,[1775] (junior homonym); *vaualbum* Esper,1780; *l-album* Esper,1789; *triangulum* Fabricius,1793; *autumnalis* Stefanelli,1873; *#balucha* Evans,1932; *#pallida* Evans,1932.
23. **Thaleropsis ionia** (Eversmann,1851) *ionia* Eversmann,1851; *ammonia* Herrich-Schäffer,1851.

Libytheidae

24. **Libythea (s.str.) celtis** (Laicharting,1782) *celtis* Laicharting,1782

Satyridae

Coenonympha pamphilus (in obs.). Çatak: Dalbastı 3km S, 1300m. 17 05 2003. - 1♂ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. - 2♂ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - **Coenonympha saadi** 1♂ 1A Çatak: Atlıhan, 1200m. 19 06 2002. - 1♂ Çatak: Büyükağaç, 1400m. 19 06 2002 (species inhabit in the openings of Quercus-Paliurus woodlands). - **Esperarge clymene** (in obs.). Çatak: Büyükağaç, 1400m. 19 06 2002. - **Maniola telmessia** 1♂ Çatak: Büyükağaç, 1400m, 19 06 2002. - 1♂ Çatak: Dalbastı 3km S, 1300m. 30 05 2003 (butterflies feed on Tournefortia sp.). - 2♂ Çatak: Narlı: Övecek, 1400m. 26 05 2001.

25. **Coenonympha (s.str.) pamphilus** (Linnaeus,1758) *pamphilus* Linnaeus,1758; *menalcas* Poda,1761; *nephele* Hufnagel,1766; *marginata* Heyne,1894; *orantia* Fruhstorfer,1908; *scota* Verity,1911; *infrarasa* Verity,1926; *juldusia* Verity,1926; *asiaemontium* Verity,1926; *euxina* Verity,1926; *posteuxina* Verity,1926; *londonii* Verity,1926; *neolyllus* De Lattin,1950
26. **Coenonympha (s.str.) saadi** (Kollar,[1849]) *saadi* Kollar,[1849]; *iphias* Eversmann,1851.
27. **Hipparchia (Neohipparchia) fatua** (Freyer,1844) *fatua* Freyer,1844; *sichaea* Lederer,1857; *insularis* Turati,1929; *elineata* Verity,1937; *infracastanea* Verity,1938; *kosswigi* De Lattin,1950.

28. **Maniola (Telmessiola) telmessia (Zeller,1847)** *telmessia* Zeller,1847; *pallescens* Butler,1868; *kurdistanica* Heyne,1894; *oreas* Le Cerf,1912; *maniolidis* Le Cerf,1912; *ornata* Turati & Fiori,1930; *marenigrans* Verity,1938; *pelekasi* Kattulas & Koutsafikis,1978.

Lycaenidae

- Callophrys rubi** 1♂ Çatak: Dalbastı 3km S, 1300m. 17 05 2003 (Hilly place covered by mixed forest (Quercus, Crataegus, Prunus, Acer, Celtis), with malacophyllous plants and grasses. Butterfly feeds on *Cardaria draba*). - **Callophrys suaveola** (in obs.). Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. - 1♂ Çatak: Dalbastı 3km S, 1300m. 17 05 2003. - 2♂ Çatak: Dalbastı 3km S, 1300m, 30 04 2005. - **Celastrina argiolus** 3♂ 1♀ Çatak: Dalbastı 3km S, 1300m, 30 04 2005. - 3♂ Çatak: Dalbastı 3km S, 1300m. 04 05 2003. (Hilly place covered by mixed forest (Quercus, Crataegus, Prunus, Acer, Celtis), with malacophyllous plants and grasses). - **Cupido minimus** 1♀ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. - **Cupido osiris** (in obs.). Çatak: Dalbastı 3km S, 1300m. 30 05 2003 (Butterflies feed on *Onobrychis armena*). - 1♂ 2♀ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. - 1♂ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - **Glaucopsyche alexis** (in obs.). Çatak: Dalbastı 3km S, 1300m. 30 05 2003 (Butterflies feed on *Onobrychis armena*). - 1♂ Çatak: Dalbastı 3km S, 1300m, 30 04 2005. - 2♂ 2♀ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - 4♂♂ Çatak: Dalbastı meşeliği, 1650m. 07 06 2003. - 6♂ 1♀ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. - 17♂♂ Çatak: Dalbastı 3km S, 1300m. 17 05 2003 (Hilly place covered by mixed forest (Quercus, Crataegus, Prunus, Acer, Celtis), with malacophyllous plants and grasses). **Heodes tityrus** 2♂ Çatak: Dalbastı 3km S, 1300m. 17 05 2003 (Hilly place covered by mixed forest (Quercus, Crataegus, Prunus, Acer, Celtis), with malacophyllous plants and grasses). - **Lycaena phlaeas** 1♂ Çatak: Dalbastı 3km S, 1300m. 17 05 2003. - **Plebejus (Plebejides) sephirus** 1♂ Çatak: Dalbastı 3km S, 1300m. 30 05 2003 (Butterflies feed on *Onobrychis armena*). - 3♂ 1♀ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - **Polyommatus (Aricia) agestis** 1♂ Çatak: Büyükağaç, 1400m. 19 06 2002 (Species inhabit in the openings of Quercus-Paliurus woodlands). - 2♂ Çatak: Dalbastı 3km S, 1300m, 30 04 2005. - 2♂ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. - 2♂ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - **Polyommatus (Cyaniris) antiochena** 1♂ 3♀ Çatak: Dalbastı meşeliği, 1650m. 07 06 2003. - 1♂ Çatak: Athhan, 1200m. 17 05 2003 (Rocky stony mountain slope covered by degraded mixed forest (Quercus, Celtis, Prunus, Crataegus) with degraded malacophyllous plants and grasses). - 1♂ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. - 1♂ Çatak: Narlı Konağa meşeliği, 1800m. 26 05 2001. - 2♂ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - 4♂ 2♀ Çatak: Dalbastı 3km S, 1300m. 17 05 2003 (Hilly place covered by mixed forest (Quercus, Crataegus, Prunus, Acer, Celtis), with malacophyllous plants and grasses). - **Polyommatus (Lysandra) bellargus** 1♂ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - **Polyommatus (Plebicula) amandus** 1♂ Çatak: Dalbastı 3km S, 1300m. 30 05 2003. - 1♂ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. - **Polyommatus (s.str.) icarus** (in obs.). Çatak: Dalbastı meşeliği, 1650m. 07 06 2003. - 1♂ Çatak: Dalbastı 3km S, 1300m. 30 05 2003. - **Satyrus abdominalis** 1♂ Çatak: Atlıhan, 1200m. 19 06 2002. - 1♂ Çatak: Dalbastı 3km S, 1300m. 30 05 2003. - **Satyrus zabni** 4♂ Çatak: Büyükağaç, 1400m. 19 06 2002 (Species inhabit in the openings of Quercus-Paliurus woodlands). - **Tarucus balkanicus** 1♂ Çatak: Atlıhan, 1200m. 17 05 2003 (Rocky stony mountain slope covered by degraded mixed forest (Quercus, Celtis, Prunus, Crataegus) with degraded malacophyllous plants and grasses). - **Thersamonia asabinus** 1♂ Çatak: Dalbastı 3km S, 1300m. 17 05 2003. - **Tomares desinens** 1♂ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - 1♀ Çatak: Dalbastı 3km S, 1300m. 17 05 2003. - 1♂ Çatak: Dalbastı 3km S, 1300m. 04 05 2003. - **Tomares romanovi** 2♂ Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. - 4♂ 1♀ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - 8♂♂ Çatak: Dalbastı 3km S, 1300m. 17 05 2003.
29. **Callophrys rubi (Linnaeus,1758)** *rubi* Linnaeus,1758; *caecus* Fourcroy,1785; *virgatus* Verity,1913; *herculeana* Pfeiffer,1927
30. **Callophrys suaveola (Staudinger,1881)** *suaveola* Staudinger,1881
31. **Celastrina argiolus (Linnaeus,1758)** *argiolus* Linnaeus,1758; *cleobis* Sulzer,1776; *thersanon* Bergsträßer,1779; *argyphontes* Bergsträßer,1779; *argalus* Bergsträßer,1779; *marginatus* Retzius,1783; *acis* Fabricius,1787 *nec* Dru.,[1773]; *#parvipuncta* Fuchs,1880; *calidogenita* Verity,1919; *britannica* Verity,1919.
32. **Cupido (s.str.) osiris (Meigen,[1829])** *osiris* Meigen,[1829]; *saportae* Dupnchel,1832; *violacea* Verity,1911; *sebrus* Boisduval,[1833].
33. **Glaucopsyche (s.str.) alexis (Poda,1761)** *alexis* Poda,1761; *damaetas* [Denis & Schiffermüller,1775; *#sublugens* Strand,1909; *#insulicola* Turati & Fiori,1930; *mironi* Coutsis,1976.
34. **Glaucopsyche (Iolana) lessei Bernardi,1964** *lessei* Bernardi,1964; *christinae* Betti,1977; *cappadocia* Betti,1977
35. **Lampides boeticus (Linnaeus,1767)** *boeticus* Linnaeus,1767; *damoetes* Fabricius,1775; *coluteae* Fuessly,1775; *pisorum* Fourcroy,1785; *boedicus* Borkhausen,1788; *#baeticus* Latreille,1809; *armeniensis* Gerhard,1886; *bagus* Distant,1886
36. **Lycaena (Loweia) tityrus (Poda,1761)** *tityrus* Poda,1761; *acriion* [Brünnich],1763; *orientalis* Staudinger,1881; *argentifex* Balint,1990.
37. **Lycaena (Thersamonia) asabinus (Gerhard,[1850])** *#helius* Herrich-Schäffer,[1851]; *asabinus* Herrich-Schäffer,[1852].
38. **Lycaena (Thersamonia) kurdistanicus (Riley,1921)** *kurdistanica* Riley,1921
39. **Lycaena (s.str.) phlaeas (Linnaeus,1761)** *phlaeas* Linnaeus,1761; *virgaureae* Fourcroy,1785 *nec* Linn.,1758; *eleus* Fabricius,1798; *aestivus* Zeller,1850; *schmidtii* Gerhard,1853
40. **Plebejus (Plebejides) zephyrinus (Christoph,1884)** *zephyrinus* Christoph,1884
41. **Polyommatus (Aricia (s.str.)) agestis ([Denis & Schiffermüller],1775)** *medon* Hufnagel,1766 *nec* Linn.,1763; *alexis* Rottentburg,1775 *nec* Poda,1761; *agestis* [Denis & Schiffermüller],1775; *astrarche* Bergsträßer,[1779].
42. **Polyommatus (s.str. (Cyaniris)) bellis (Freyer,[1842])** *bellis* Freyer,[1842]
43. **Polyommatus (s.str. (Cyaniris)) antiochenus (Lederer,1861)** *antiochena* Lederer,1861

44. **Polyommatus (s.str. (Lysandra)) bellargus (Rottemburg,1775)** *bellargus* Rottemburg,1775; *thetis* Rottemburg,1775 nec Dru.,1773; *adonis* Denis & Schiffermüller,1775; *salacia* Bergsträßer,1779; *venilia* Bergsträßer,1779; *hyacinthus* Lewin,1795; *urania* Gerhard,1851; *persemagna* Verity,1937; *arentissima* Verity,1937; *arens* Verity,1937; *arentior* Verity,1937; *antearentior* Verity,1937; *parabellargus* Verity,1939; *shakla* Higgins,1958
45. **Polyommatus (s.str. (Plebicula)) amandus (Schneider,1792)** *icarius* Esper,1789 nec Rottemburg,1775; *amandus* Schneider,1792
46. **Polyommatus (s.str.) icarus (Rottemburg,1775)** *argus* Poda,1761 nec Linn.,1758; *alexis* Scopoli,1763 nec Pda,1761; *thetis* Esper,1777 nec Dru.,1773; *icarus* Rottemburg,1775; *pampholyge* Bergsträßer,1779; *candybus* Bergsträßer,1779; *candiope* Bergsträßer,1779; *candaon* Bergsträßer,1779; *oceanus* Bergsträßer,1779; *fuscioles* Fourcroy,1785; *icarinus* Scriba,1795; *pusillus* Gerhard,1851; *neglectus* Stradomsky & Arzanov,1999
47. **Rubrapterus bavius (Eversmann,1832)** *bavius* Eversmann,1832
48. **Satyrium (Nordmannia) abdominalis (Gerhard,1850)** *abdominalis* Gerhard,1850; *gerhardi* Staudinger,1895; *alboabdominalis* Pfeiffer,1938; *persica* Riley,1939; *#gerhardi* Wiltshire,1943; *elita* Higgins,1964.
49. **Satyrium (Nordmannia) zabni Oorschot & Brink,1991** *#zabni* Higgins,1964; *zabni* Oorschot & Brink,1991.
50. **Satyrium (Superflua) ledereri (Boisduval,1848)** *ledereri* Boisduval,1848
51. **Tarucus (s.str.) balkanicus (Freyer,1843)** *balkanicus* Freyer,1843
52. **Tomares callimachus (Eversmann,1848)** *callimachus* Eversmann,1848
53. **Tomares desinens Nekrutenko & Effendi,1980** *desinens* Nekrutenko & Effendi,1980
54. **Tomares romanovi (Christoph,1882)** *romanovi* Christoph,1882

Hesperiidae

Carcharodus alceae 1♂ Çatak: Dalbastı 3km S, 1300m. 17 05 2003 (Hilly place covered by mixed forest (Quercus, Crataegus, Prunus, Acer, Celtis), with malacophyllous plants and grasses). - **Erynnis (Hesperopegasus) marloyi** 1♂ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - **Erynnis (s.str.) tages** (in obs.). Çatak: Narlı, Dalbastı, 1750m. 25 05 2001. 1♂ Çatak: Atlıhan, 1200m. 17 05 2003. Rocky stony mountain slope covered by degraded mixed forest (Quercus, Celtis, Prunus, Crataegus) with degraded malacophyllous plants and grasses). - 1♂ Çatak: Dalbastı 3km S, 1300m. 17 05 2003. - 1♂ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - **Spialia orbifer** 1♂ Çatak: Atlıhan, 1200m. 19 06 2002. - 1♂ Çatak: Büyükağaç, 1400m. 19 06 2002. (Species inhabit in the openings of Quercus-Paliurus woodlands). - 1♂ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - **Thymelicus lineolus** 4♂ Çatak: Büyükağaç, 1400m. 19 06 2002 (Species inhabit in the openings of Quercus-Paliurus woodlands). - **Thymelicus novus** 1♂ Çatak: Narlı: Övecek, 1400m. 26 05 2001. - **Thymelicus sylvestris** 4♂ Çatak: Büyükağaç, 1400m. 19 06 2002 (Species inhabit in the openings of Quercus-Paliurus woodlands).

55. **Carcharodus (s.str.) alceae (Esper,1780)** *alceae* Esper,1780; *malvae* Hufnagel,1766 nec Linn.,1758; *malvarum* Hoffmannsegg,1804; *magnaustalis* Verity,1924; *corsicus* Picard,1948.
56. **Erynnis (Hesperopegasus) marloyi (Boisduval,1834)** *marloyi* Boisduval,1834; *sericea* Freyer,1838; *rustan* Kollar,1849.
57. **Erynnis (s.str.) tages (Linnaeus,1758)** *tages* Linnaeus,1758; *morio* Scopoli,1763; *geryon* Rottemburg,1775; *subclarus* Verity,1921.
58. **Ochlodes venatus (Bremer & Grey,1852)** *venatus* Bremer & Grey,1852
59. **Pyrgus sidae (Esper,1784)** *sidae* Esper,1784
60. **Spialia (Neospialia) orbifer (Hübner,1823)** *orbifer* Hübner,1823; *tesselloides* Herrich-Schäffer,1845.
61. **Thymelicus lineolus (Ochsenheimer,1808)** *lineolus* Ochsenheimer,1808; *virgula* Hübner,1813 nec Retz.,1783; *ludoviciae* Mabilie,1883; *pallida* Tutt,1896; *clara* Tutt,1905; *hemmingi* Romei,1927; *melissus* Zerny,1932; *fornax* Hemming,1934
62. **Thymelicus sylvestris (Poda,1761)** *sylvestris* Poda,1761; *flava* Brünnich,1763; *linea* Müller,1764; *thaumas* Hufnagel,1766; *divaricatus* Fourcroy,1785; *venula* Hübner,1813; *obscura* Verity,1905

(Moths)

Oecophoridae

Pleurota sp. 2 ex. Çatak: Dalbastı 3km S, 1300m. 17 05 2003.

63. **Esperia imitatrix (Zeller,1847)** *imitatrix* Zeller,1847

Sesiidae

64. **Synanthedon vespiformis (Linnaeus,1761)** *vespiformis* Linnaeus,1761; *asiliformis* Rottemburg,1775; *oestriformis* Rottemburg,1775; *cynipiformis* Esper,1783; *chrysorrhoea* Donovan,1795

Tortricidae

65. **Aethes tesserana** ([Denis & Schiffermüller],1775) *tesserana* [Denis & Schiffermüller],1775; *aleella* Sulzer,1776; *heiserana* Fabricius,1787; *groendalana* Thunberg,1791.
66. **Aleimma loeflingianum** (Linnaeus,1758) *loeflingiana* Linnaeus,1758; *mixtana* Fabricius,1794; *plumbana* Hübner,[1799]; *ectypana* Hübner,[1800]; *plumbeolana* Haworth,1811
67. **Aphelia (Zelotherses) ochreana** (Hübner,[1799]) *ferugana* Hübner,1793 (homonym); *ochreana* Hübner,[1799]; *shaqlawana* Amsel,1955; *chretieni* Obraztsov,1957
68. **Crocidosema plebejana** Zeller,1847 *plebejana* Zeller,1847; *altheana* Mann,1855; *lavaterana* Millière,1863; *peregrinana* Möschler,1866; *obscura* Wollaston,1879; *blackburnii* Butler,1881; *signatana* Walsingham,1894; *ptiladelpha* Meyrick,1917; *insulana* Aurivillius,1922; *synneurota* Meyrick,1926; *tornocycla* Turner,1946; *charmera* Turner,1946.
69. **Metendothenia atropunctana** (Zetterstedt,1839) *atropunctana* Zetterstedt,1839; *ochromelana* Guenée,1845
70. **Pammene amygdalana** (Duponchel,1842) *amygdalana* Duponchel,1842
71. **Pammene gallicolana** (Lienig & Zeller,1846) *gallicolana* Lienig & Zeller,1846
72. **Tortrix viridana** (Linnaeus,1758) *viridana* Linnaeus,1758; *suttneriana* [Denis & Schiffermüller],1775; *flavipes* Fourcroy,1785; *flavana* Zincken,1821 nec Hübner,[1799]; *coeruleana* Sorhagen,1881.

Zygaenidae

Adscita sp. 1♂ Çatak: Dalbastı meşeliği, 1600m. 02 06 2003. - **Zygaena loti** (in obs.). Çatak: Dalbastı 3km S, 1300m. 30 05 2003 (moth feeds on *Onobrychis armena*).

73. **Zygaena (Agrumenia) loti** ([Denis & Schiffermüller],1775) *loti* [Denis & Schiffermüller],1775; *fulvia* Fabricius,1777

Pyralidae

Pyralidae specimens will be published separately.

74. **Acrobasis atrisquamella** Ragonot,1887 *atrisquamella* Ragonot,1887; *nigrisquamella* Amsel,1953
75. **Acrobasis glaucella** Staudinger,1859 *glaucella* Staudinger,1859; *fallouella* Ragonot,1871; *anatolica* Caradja,1910.
76. **Aeglotis argentalis** (Christoph,1887) *argentalis* Christoph,1887
77. **Ancylosis (Heterographis) hellenica** (Staudinger,1870) *hellenica* Staudinger,1870; *deliciosella* Caradja,1910.
78. **Anthophilopsis baphialis** (Staudinger,1870) *baphialis* Staudinger,1870; *#baphiale* Caradja,1917.
79. **Aporodes floralis** (Hübner,[1809]) *floralis* Hübner,[1809]; *grisealis* Caradja,1917.
80. **Arsissa divaricella** (Ragonot,1887) *divaricella* Ragonot,1887; *#aurantiacella* Caradja,1910; *velocella* Toll,1948; *firusella* Amsel,1961.
81. **Arsissa ramosella** (Herrich-Schäffer,[1855]) *ramosella* Herrich-Schäffer,[1855]; *albiramosella* Caradja,1916; *caradjaella* Zerny,1939.
82. **Asalebria (Exophora) florella** (Mann,1862) *florella* Mann,1862
83. **Bazaria leucochrella** (Herrich-Schäffer,[1855]) *leucochrella* Herrich-Schäffer,[1855].
84. **Bradyrrhoa cantenerella** (Duponchel,1837) *cantenerella* Duponchel,1837; *ravella* Heydenreich,1851; *subflavella* Ragonot,1887; *sardicolella* Schawerda,1936; *variegatella* Lucas,1948; *brunneella* Lucas,1955
85. **Bradyrrhoa trapezella** (Duponchel,1836) *trapezella* Duponchel,1836; *cinerella* Duponchel,1836; *saxeella* Zeller,1848; *chalcidoniella* Herrich-Schäffer,1851; *seniella* Staudinger,1879; *petryi* Schawerda,1933.
86. **Chilo pulverosellus** Ragonot,1895 *pulverosellus* Ragonot,1895; *brevipalpellus* Zerny,1914; *fernandezi* Joannis,1932; *lemarchandellus* Lucas,1945.
87. **Conobathra repandana** (Fabricius,1798) *repandana* Fabricius,1798; *tumidella* Zincken,1818; *zelleri* Ragonot,1888.
88. **Cynaeda gigantea** (Wocke,1871) *gigantea* Wocke,1871
89. **Elegia fallax** (Staudinger,1881) *fallax* Staudinger,1881; *atrifasciella* Ragonot,1887; *nigribasella* Ragonot,1895; *iozona* Meyrick,1937; *elegiella* Amsel,1953.
90. **Endotricha flammeal** ([Denis & Schiffermüller],1775) *flammealis* [Denis & Schiffermüller],1775; *carnealis* De Lattin,1951.
91. **Ephelis cruentalis** (Geyer,[1832]) *cruentalis* Geyer,[1832]; *bourjotalis* Duponchel,1833; *badialis* Treitschke,1835
92. **Epidauria discella** Ragonot,1901 *discella* Ragonot,1901
93. **Epidauria strigosa** (Staudinger,1879) *strigosa* Staudinger,1879
94. **Euchromius bellus** (Hübner,1796) *bella* Hübner,1796; *bellalis* Hübner,[1825].
95. **Euchromius cochlearellus** (Amsel,1949) *cochlearella* Amsel,1949
96. **Euchromius keredjellus** (Amsel,1949) *keredjella* Amsel,1949

97. **Euchromius ocellus (Haworth,[1811])** *ocellea* Haworth,[1811]; *cyrilli* Costa,1832; *fumiculella* Treitschke,1832; *texana* Robinson,1870; *gigantea* Turati,1924; *quadrii* Ahmad,Zaidi & Kamaluddin,1982
98. **Euchromius superbullus (Zeller,1849)** *superbullus* Zeller,1849; *wockeella* Zeller,1863; *cypriusella* Amsel,1958.
99. **Euchromius vinculellus (Zeller,1847)** *vinculellus* Zeller,1847; *corsicalis* Hampson,1919; *joiceyella* Schmidt,1934; *bahrlutella* Amsel,1949.
100. **Euzophera (s.str.) flagella (Lederer,1869)** *flagella* Lederer,1869
101. **Euzophera (s.str.) umbrosella (Staudinger,1879)** *umbrosella* Staudinger,1879; *albogilvella* Ragonot,1887; *depauperatella* Ragonot,1901.
102. **Euzopherodes lutisignella (Mann,1869)** *lutisignella* Mann,1869; *leonhardi* Rebel,1910; *scipionella* Turati,1924; *battella* Turati,1924.
103. **Glaucobaris euchromiella (Ragonot,1895)** *euchromiella* Ragonot,1895; *sinualis* Hampson,1900; *rebeli* Osthelder,1941.
104. **Hypochalcia ahenella ([Denis & Schiffermüller],1775)** *ahenella* [Denis & Schiffermüller],1775; *aeneella* Hübner,1796; *obscuratus* Haworth,1809; *tetrix* Haworth,1811; *ahenalis* Hübner,[1825]; *rubiginella* Treitschke,1833; *bistrigella* Duponchel,1836; *luridella* Schläger,1845; *caucasica* Ragonot,1893; *lugubrella* Hering,1924
105. **Hypsopygia costalis (Fabricius,1775)** *costalis* Fabricius,1775; *#lugens* Rebel,1903; *syriaca* Zerny,1914; *lugens* Caradja,1917.
106. **Hypsotropa limbella Zeller,1848** *limbella* Zeller,1848
107. **Lambaesia straminella (Zerny,1914)** *straminella* Zerny,1914; *alphetopis* Meyrick,1937.
108. **Mecyna subsequalis (Herrich-Schäffer,1851)** *subsequalis* Herrich-Schäffer,1851; *consequens* Meyrick,1932.
109. **Mecyna trinalis ([Denis & Schiffermüller],1775)** *trinalis* [Denis & Schiffermüller],1775
110. **Mesocrambus candidellus (Herrich-Schäffer,[1848])** *candidellus* Herrich-Schäffer,[1848]; *#candiellus* Bleszynski,1965.
111. **Metacrambus carectellus (Zeller,1847)** *carectellus* Zeller,1847; *lugdunellus* Millière,1868; *truncatellus* Caradja,1916.
112. **Metallosticha argyrogrammos (Zeller,1847)** *argyrogrammos* Zeller,1847
113. **Myelois (Gnathogutta) circumdatella Lederer,1858** *circumdatella* Lederer,1858; *ottoella* Schawerda,1924
114. **Myelois (Gnathogutta) pumicosa Lederer,1855** *pumicosa* Lederer,1855
115. **Myelois (s.str.) circumvoluta (Fourcroy,1785)** *circumvoluta* Fourcroy,1785; *circumvolutella* Villers,1789; *cribrella* Hübner,1796; *carhdui* Haworth,1811; *medullalis* Hübner,[1825]; *pallium* Vallot,1829; *gilvescentella* Fuchs,1903; *britannicella* Amsel,1951; *impunctata* Hartig,1952; *nigrapeza* Hartig,1952
116. **Nephoterix minimella Amsel,1953** *minimella* Amsel,1953
117. **Nomophila noctuella ([Denis & Schiffermüller],1775)** *noctuella* [Denis & Schiffermüller],1775
118. **Oncocera semirubella (Scopoli,1763)** *semirubella* Scopoli,1763; *rosella* Goeze,1783 *nec* Sc.,1763; *purpurella* Thunberg,1788; *sanguinella* Hübner,1796; *sanguinea* Haworth,1811; *nigrella* Caradja,1916
119. **Paracorsia repandalis ([Denis & Schiffermüller],1775)** *repandalis* [Denis & Schiffermüller],1775
120. **Pempelia alpigenella (Duponchel,1836)** *alpigenella* Duponchel,1836; *wagnerella* Freyer,1845
121. **Pempelia romanoffella (Ragonot,1887)** *romanoffella* Ragonot,1887
122. **Phlyctaenomorpha sinuosalis (Le Cerf,1910)** *sinuosalis* le Cerf,1909; *platyphaea* Meyrick,1937.
123. **Phycita strigata (Staudinger,1879)** *strigata* Staudinger,1879
124. **Phycitodes albatella (Ragonot,1887)** *albatella* Ragonot,1887
125. **Phycitodes nigrilimbella (Ragonot,1887)** *nigrilimbella* Ragonot,1887
126. **Pima boisduvaliella (Guenée,1845)** *boisduvaliella* Guenée,1845
127. **Pterothrixidia impurella (Duponchel,1836)** *impurella* Duponchel,1836
128. **Pyrallis regalis [Denis & Schiffermüller],1775** *regalis* [Denis & Schiffermüller],1775
129. **Pyrasia gutturalis (Staudinger,1879)** *gutturalis* Staudinger,1879
130. **Pyrausta (Haematia) despicata (Scopoli,1763)** *despicata* Scopoli,1763; *cespitalis* [Denis & Schiffermüller],1775.
131. **Pyrausta (Haematia) sanguinalis (Linnaeus,1767)** *sanguinalis* Linnaeus,1767; *crentalis* Scriba,1770; *haematalis* Hübner,[1819]
132. **Pyrausta (Haematia) virginalis (Duponchel,1832)** *virginalis* Duponchel,1832; *auroralis* Zeller,1847; *neglectalis* Caradja,1916
133. **Sciota (s.str.) imperialella (Ragonot,1887)** *imperialella* Ragonot,1887
134. **Scoparia ingratalis (Zeller,1846)** ? *majalis* Scopoli,1763; *ingratalis* Zeller,1846; *ingratalis* Herrich-Schäffer,1853; *sibirica* Lederer,1853; *octavianella* Mann,1859; *catalonica* Leraut,1982
135. **Sitochroa palealis ([Denis & Schiffermüller],1775)** ? *flaveolata* Hufnagel,1767; *palealis* [Denis & Schiffermüller],1775; *stigmatalis* Villers,1789; *selenalis* Hübner,[1819]
136. **Sitochroa verticalis (Linnaeus,1758)** *verticalis* Linnaeus,1758; *inversa* Fourcroy,1785; *cinctalis* Treitschke,1829
137. **Sultania lophotalis (Hampson,1900)** *lophotalis* Hampson,1900
138. **Synaphe punctalis (Fabricius,1775)** *punctalis* Fabricius,1775; *angustalis* [Denis & Schiffermüller],1775.
139. **Tretopteryx pertusalis (Geyer,[1832])** *pertusalis* Geyer,[1832]; *weissenbornii* Freyer
140. **Trigonuncus euergestalis Amsel,1953** *euergestalis* Amsel,1953; *#euergestalis* Wiltshire,1957.

141. **Udea ferrugalis (Hübner,1796)** *ferruginalis* Rossi,1794; *ferrugalis* Hübner,1796; #*ferugalis* Hübner,1796; *martialis* Guenée,1854; *hypatialis* Walker,1859; *testacea* Butler,1879
142. **Uresiphita polygonalis ([Denis & Schiffermüller],1775)** *polygonalis* [Denis & Schiffermüller],1775; #*limbalis* [Denis & Schiffermüller],1775; *gilvata* Fabricius,1794; *orientalis* Fabricius,1794; *diversalis* Hübner,1796; *rusticalis* Hübner,1796; *aversalis* Guenée,1854; *consanguinalis* Guenée,1854; *teriadalis* Guenée,1854; *deprivalis* Walker,1859; *virescens* Butler,1881; *ochrocrossa* Clarke,1971
143. **Zophodiodes leucocostella Ragonot,1887** *leucocostella* Ragonot,1887

Cimeliidae

Axia theresiae 6♂ Çatak: Narlı Konalga, 1800m. 26 05 2001.

144. **Axia (Epicimelia) theresiae (Korb,1900)** *theresiae* Korb,1900 (fig. 56)

Drepanidae

Cilix asiatica 1♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Watsonalla binaria** 3♂ 2♀ Çatak: Narlı Konalga, 1800m. 26 05 2001.

145. **Cilix asiatica A.Bang-Haas,1907** *asiatica* A.Bang-Haas,1907; *depalpata* Strand,1913
146. **Watsonalla binaria (Hufnagel,1767)** *binaria* Hufnagel,1767; *falcata* Fabricius,1775; *falculataria* Villers,1789; *falcatalis* Haworth,1802; *uncula* Hübner,[1802]

Geometridae

Orthonama obstipata 1♂ Çatak: Dalbastı 3km S, 1300m, 30 04 2005. - **Pseudopanthera syriacata** 1♂ Çatak: Dalbastı 3km S, 1300m. 17 05 2003 (Hilly place covered by mixed forest (Quercus, Crataegus, Prunus, Acer, Celtis), with malacophyllous plants and grasses). - **Pydna badiaria** 2♂ 6♀ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Rhodostrophia sieversi** 9♂ 2♀ Çatak: Narlı Konalga, 1800m. 23 05 2001. - **Scopula sp.** 2ex Çatak: Büyükağaç, 1400m. 19 06 2002. Species inhabit in the openings of Quercus-Paliurus woodlands. - **Semiothisa clathrata** 1♂ Çatak: Dalbastı 3km S, 1300m. 17 05 2003 (Hilly place covered by mixed forest (Quercus, Crataegus, Prunus, Acer, Celtis), with malacophyllous plants and grasses) - 1♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Semiothisa glarearia** 1♀ Çatak: Büyükağaç, 1400m. 19 06 2002 (Species inhabit in the openings of Quercus-Paliurus woodlands). - 6♂ Çatak: Narlı Konalga, 1800m. 26 05 2001.

147. **Chiasmia clathrata (Linnaeus,1758)** *clathrata* Linnaeus,1758; *almacola* Wehrli,1934.
148. **Heliomata glarearia (Brahm,1791)** #*glarearia* [Denis & Schiffermüller],1775; *glarearia* Brahm,1791.
149. **Orthonama obstipata (Fabricius,1794)** *obstipata* Fabricius,1794; *fluviata* Hübner,[1799]; *gemmata* Hübner,1799; *albicinctata* Haworth,1809; *angustata* Haworth,1809; *quaerendaria* Costa,1850; *baccata* Guenée,[1858]; *lapillata* Guenée,[1858]; *contrariata* Walker,1862; *exagitata* Walker,1862; *intrusata* Walker,1862; *peracutata* Walker,1862; *signataria* Walker,1863; *obruptata* Walker,1863; *pigrata* Walker,1866; *plemyrata* R.Felder & Rogenhofer,1875; *inconspicua* Warren,1896; *brunneipennis* Hulst,1896; *discata* Warren,1905
150. **Pseudopanthera syriacata (Guenée,1852)** *syriacata* Guenée,1852; #*syriacaria* Wiltshire,1958
151. **Pydna badiaria (Freyer,[1841])** *badiaria* Freyer,[1841]; *telaria* Herrich-Schäffer,[1847]; *cervinaria* Herrich-Schäffer,[1847]; *praecanaria* Eversmann,1847; *pollenaria* Freyer,1854.
152. **Rhodostrophia sieversi (Christoph,1882)** *sieversi* Christoph,1882
153. **Tephрина hopfferaria (Staudinger,1879)** *hopfferaria* Staudinger,1879

Lasiocampidae

Lasiocampa eversmanni 1 larva Çatak: Dalbastı 3km S, 1300m. 17 05 2003. - **Phyllodesma tremulifolia** 10♂ Çatak: Narlı Konalga, 1800m. 26 05 2001.

154. **Lasiocampa eversmanni (Kindermann,1843)** *eversmanni* Kindermann,1843; *eversmanni* Freyer,1844; *attrita* Stshetkin,1960.
155. **Phyllodesma (s.str.) tremulifolium (Hübner,[1810])** *betulifolium* Ochsenheimer,1810 nec Esp.,1782; *tremulifolium* Hübner,[1810]; *danieli* De Lajonquière,1963; #*tremulifolium* De Freina,1999

Sphingidae

156. **Hemaris (s.str.) syra (Daniel,1939)** *syra* Daniel,1939; #*syriaca* Müller, Kravchenko, Li, Eitschberger, Hausmann, Miller, Orlova, Ortal, Speidel, Witt,2005

157. **Macroglossum stellatarum (Linnaeus,1758)** *stellatarum* Linnaeus,1758; *nigra* Cosmovici,1892.
 158. **Proserpinus proserpinus (Pallas,1772)** *proserpinus* Pallas,1772; *oenotherae* [Denis & Schiffermüller],1775; *schiffermülleri* Fuessly,1779; *francofurtana* Fabricius,1781; *aenotheroides* Butler,[1876], *maxima* Grum-Grshimailo,1887; *japetus* Grum-Grshimailo,1890; *gigas* Oberthür,1922.
 159. **Marumba quercus ([Denis & Schiffermüller],1775)** *quercus* [Denis & Schiffermüller],1775; *denisii* Fuessly,1779; *mesopotamica* O.Bang-Haas,1938; *schirasi* O.Bang-Haas,1938.

Lymantriidae

160. **Euproctis melania (Staudinger,1892)** *melania* Staudinger,1892; *melaniodes* Strand,1910; *#melaina* De Freina,1999.
 161. **Lymantria dispar (Linnaeus,1758)** *dispar* Linnaeus,1758; *disparina* Müller,1802; *japonica* Motschulsky,1860; *disparoides* Mabilie,1876; *bordigalensis* Mabilie,1876; *asiatica* Wnukowsky,1926
 162. **Ocnerogya amanda Staudinger,[1892]** *amanda* Staudinger,[1892]

Notodontidae

Harpyia milhauseri 1♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Spatalia argentea** 9♂ Çatak: Narlı Konalga, 1800m. 26 05 2001.

163. **Harpyia milhauseri (Fabricius,1775)** *milhauseri* Fabricius,1775; *terrifica* [Denis & Schiffermüller],1775; *vidua* Knoch,1781; *albida* Daniel,1932
 164. **Spatalia argentina ([Denis & Schiffermüller],1775)** *argentina* [Denis & Schiffermüller],1775

Noctuidae

Acontia lucida 5♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Agrotis ipsilon** 1♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Autographa circumflexa** 1♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Behounekia freyeri** 8♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Dysgonia algira** 1♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Euxoa conspicua** 1♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Hypena sp.** 1♂ Çatak: Büyükağaç, 1400m. 19 06 2002 (Species inhabit in the openings of Quercus-Paliurus woodlands). - **Minucia lunaris** 6♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Mythimna l-album** 2♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Mythimna vitellina** 4♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Omphalophana antirrhini** 2♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Pachetra sagittigera** 1♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Periphanes victorina** 1♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Rhynchodontodes antiqualis** 3♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Simyra dentinosa** 10 larvae from Çatak: Dalbastı 3km S, 1300m. 30 05 2003 (Larvae feed on Euphorbia spp.). - 1♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Tyta luctuosa** (in obs.). Çatak: Dalbastı 3km S, 1300m. 17 05 2003. 1♂ Çatak: Dalbastı 3km S, 1300m. 30 05 2003 (Moth feeds on Cardaria draba by day).

165. **Acontia lucida (Hufnagel,1766)** *lucida* Hufnagel,1766; *solaris* [Denis & Schiffermüller],1775; *albicollis* Fabricius,1781; *rupicola* Borkhausen,1792; *insolatrix* Hübner,[1822]; *lugens* Alpheraky,1889.
 166. **Agrotis (s.str.) desertorum Boisduval,1840** *desertorum* Boisduval,1840; *deserticola* Eversmann,1842
 167. **Agrotis (s.str.) ipsilon (Hufnagel,1766)** *ipsilon* Hufnagel,1766; *suffusa* [Denis & Schiffermüller],1775; *idonea* Cramer,[1780]; *spinula* Esper,[1786]; *spinifera* Villers,1789.
 168. **Agrotis (s.str.) segetum ([Denis & Schiffermüller],1775)** *segetum* [Denis & Schiffermüller],1775; *sordida* [Denis & Schiffermüller],1775; *undulatus* Goeze,1781 (praeocc.); *nigricornis* Villers,1789; *segetis* Fabricius,1794; *catenatus* Haworth,1803; *monileus* Haworth,1803; *pectinatus* Haworth,1803; *connexus* Haworth,1803; *subatratus* Haworth,1803; *nigricornutus* Haworth,1803; *praecox* Hübner,[1808]; *fervida* Hübner,[1824]; *affinis* Stephens,1829; *sicula* Boisduval,1840; *dimidia* Zeller,1847; *sicania* Guenée,1852; *marginalis* Walker,1857; *aversus* Walker,1857; *correctus* Walker,1857; *obliviosus* Walker,1857; *denticulosus* Wallengren,1860; *certificatus* Walker,1865; *conspurcatus* Walker,1865; *repulsus* Walker,1865; *ingratus* Butler,1878; *pallidus* Staudinger,1881; *lassa* Swinhoe,1886.
 169. **Behounekia freyeri (Frivaldsky,1835)** *freyeri* Frivaldsky,1835; *lintea* Freyer,1842; *orontii* Herrich-Schäffer,[1851]; *senescens* Eversmann,1856; *#linthea* Lederer,1870
 170. **Caradrina (Platyperigea) aspersa (Rambur,1834)** *aspersa* Rambur,1834; *anceps* Herrich-Schäffer,1849; *culoti* Turati,1913.
 171. **Cornutiplusia circumflexa (Linnaeus,1767)** *circumflexa* Linnaeus,1767; *lunata* Fabricius,1787; *flexuosa* Donovan,1807; *daubii* Freyer,1838; *graphica* Herrich-Schäffer,1851; *patefacta* Walker,[1858]; *reticulata* Moore,1882; *clarescens* Pinker & Bacallado,1975; *#unata* Kononenko & Pinratana,2005
 172. **Cryphia (Bryopsis) amasina (Draudt,1931)** *amasina* Draudt,1931
 173. **Dichagyris (Yigoga) nigrescens (Hofner,1888)** *nigrescens* Höfner,1888
 174. **Dichagyris (Yigoga) signifera ([Denis & Schiffermüller],1775)** *#signifera* [Denis & Schiffermüller],1775
 175. **Dichagyris (s.str.) melanura (Kollar,1846)** *melanura* Kollar,1846
 176. **Euxoa (s.str.) conspicua (Hübner,[1824])** *conspicua* Hübner,[1824]; *agricola* Boisduval,1829; *lycarum* Herrich-Schäffer,1846; *abdita* De Joannis,1891; *#indistincta* Strand,1915; *osthelderi* Corti,1931; *complicata* Corti,1931.

177. **Hadena (Anepia) syriaca (Osthelder,1933)** *syriaca* Osthelder,1933; *osthelderi* Draudt,1933.
 178. **Hadena (s.str.(Magnolihadena)) magnolii (Boisduval,1828)** *magnolii* Boisduval,1828; *nummosa* Eversmann,1844.
 179. **Heliothis peltigera ([Denis & Schiffermüller],1775)** *peltigera* [Denis & Schiffermüller],1775; *alpheia* Cramer,1780; *florentina* Esper,[1788]; *charmione* Stoll,1790; *straminea* Donovan,1793; *insulata* Navas,1924.
 180. **Hoplodrina ambigua ([Denis & Schiffermüller],1775)** *ambigua* [Denis & Schiffermüller],1775; *plantaginis* Hübner,[1813]; *uniformis* Swinhoe,1885
 181. **Jodia croceago (Fabricius,1787)** *#croceago* [Denis & Schiffermüller],1775; *croceago* Fabricius,1787; *aurantiagio* Donovan,1796; *corsica* Mabilie,1868
 182. **Mythimna (Aletia) l-album (Linnaeus,1767)** *l-album* Linnaeus,1767; *penicillata* Moore,1881
 183. **Mythimna (Aletia) vitellina (Hübner,[1808])** *vitellina* Hübner,[1808]; *#vitellina* Lederer,1870; *decolorata* Dannehl,1929; *saturator* Dannehl,1929; *griseocens* Dannehl,1929.
 184. **Noctua (Latanocua) orbona (Hufnagel,1766)** *orbona* Hufnagel,1766; *subsequa* [Denis & Schiffermüller],1775; *caroni* Lempke,1964.
 185. **Noctua (Paranoctua) comes (Hübner,[1813])** *orbona* Fabricius,1787 *nec* Hufn.,1767; *comes* Hübner,[1813]; *adsequa* Treitschke,1825; *prosequa* Treitschke,1825; *bergensis* Sp.-Schn.,1901.
 186. **Omphalophana anatolica (Lederer,1857)** *anatolica* Lederer,1857
 187. **Omphalophana antirrhinii (Hübner,[1803])** *antirrhinii* Hübner,[1803]
 188. **Oncocnemis fuscipicta Wiltshire,1976** *fuscipicta* Wiltshire,1976
 189. **Oncocnemis strioligera Lederer,1853** *strioligera* Lederer,1853
 190. **Ophiua lunaris (Goeze,1781)** *#lunaris* [Denis & Schiffermüller],1775; *lunaris* Goeze,1781; *undosa* Goeze,1781; *ventrilabris* Fabricius,1787; *tarsiplumalis* Hübner,1796; *chosensis* Bryk,1949.
 191. **Ozarba moldavicola (Herrich-Schäffer,[1851])** *moldavicola* Herrich-Schäffer,[1851]; *euboica* Mill.,1874
 192. **Parallelia algira (Linnaeus,1767)** *algira* Linnaeus,1767; *achatina* Sulzer,1776; *alterna* Villers,1789; *triangularis* Hübner,[1803] *nec* Thunb.,1784; *albiuitta* Guenée,1852; *festina* Walker,1858; *europa* Schawerda,1912
 193. **Periphanes victorina (Sodoffsky,1849)** *victorina* Sodoffsky,1849
 194. **Polia sagittigera (Hufnagel,1766)** *sagittigera* Hufnagel,1766; *leucophaea* [Denis & Schiffermüller],1775; *fulminea* Fabricius,1781; *vestigialis* Esper,[1785]; *ravida* Esper,[1789]; *pyrenaica* Oberthür,1884; *incana* Millière,1885.
 195. **Simyra dentinosa Freyer,1839** *dentinosa* Freyer,1839; *leucaspis* Fischer v. Waldheim,1840; *zeliha* Kornosor & Lödl,1990
 196. **Tyta luctuosa ([Denis & Schiffermüller],1775)** *luctuosa* [Denis & Schiffermüller],1775; *italica* Fabricius,1781; *atra* Goeze,1781 *nec* Linn.,1767; *astroites* Fourcroy,1785; *maculosa* Villers,1789
 197. **Zekelita (Rhynchodontodes) antiqualis (Hübner,[1809])** *antiqualis* Hübner,[1809]; *anatolica* Wagner,1931; *#antiquilis* Zukowsky,1941

Ctenuchidae

Amata hakkariana 1♂ Çatak: Dalbastı meşeliği, 1600m. 02 06 2003. - **Dysauxes sp.** 1♂ 1♀ (in copula) Çatak: Büyükağaç, 1400m. 19 06 2002. Species inhabit in the openings of Quercus-Paliurus woodlands.

198. **Amata hakkariana (De Freina,1982)** *hakkariana* De Freina,1982
 199. **Dysauxes sp.**

Arctiidae

Arctia villica 1♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Phragmatobia placida** 1♂ Çatak: Narlı Konalga, 1800m. 26 05 2001. - **Diaphora mendica** 1♂ Çatak: Narlı Konalga, 1800m. 26 05 2001.

200. **Arctia (Epicallia) villica (Linnaeus,1758)** *villica* Linnaeus,1758; *corsica* Oberthür,1911; *niceensis* Oberthür,1911; *britannica* Oberthür,1911; *meridionalis* Heinrich,1923.
 201. **Diaphora mendica (Linnaeus,1761)** *#mendica* Clerck,1759; *mendica* Linnaeus,1761; *rustica* Hübner,[1791]
 202. **Phragmatobia placida (Frivaldsky,1835)** *placida* Frivaldsky,1835

II - List of the pterygot insects recorded previously in Kato Mountains

The following 59 species (with their synonyms) of 6 pterygot orders were recorded by the authors previously. All the materials were from northern slopes of the mountains (Atlıhan, Dalbastı, and Narlı bridge). Among them, *Iranoidricerus iranensis* (Ascalaphidae) and some *Cynipidae* obtained from their galls were published in separate papers (Kemal & Koçak,2006; Kemal & Koçak,2010). Other records are almost unpublished so far (see also Koçak & Kemal,2009, 2010).

Orthoptera Acrididae

1. **Acrotylus insubricus (Scopoli,1786)** *insubricus* Scopoli,1786; *maculatum* Olivier,1791; *fasciatus* Fabricius,1793; *maderae* Audinet-Serville,1838; *inficitus* Walker,1870; *variegata* Walker,1870; *versicolor* Burr,1898; *biskrensis* Maran,1958

Neuroptera

Ascalaphidae

2. **Libelloides macaronius (Scopoli,1763)** *macaronius* Scopoli,1763
3. **Iranoidricerus iranensis (Kimmins,1938)** *iranensis* Kimmins,1938

Nemopteridae

4. **Nemoptera sinuata Olivier,1811** *sinuata* Olivier,1811

Hemiptera

Berytidae

5. **Neides tipularius (Linnaeus,1758)** *tipularius* Linnaeus,1758

Lygaeidae

6. **Rhyparochromus phoeniceus (Rossi,1794)** *phoeniceus* Rossi,1794

Pyrrhocoridae

7. **Pyrrhocoris apterus (Linnaeus,1758)** *apterus* Linnaeus,1758; *clamariensis* Fallén,1829

Diptera

Bibionidae

8. **Bibio marci (Linnaeus,1758)** *marci* Linnaeus,1758

Conopidae

9. **Myopa dorsalis Fabricius,1794** *dorsalis* Fabricius,1794

Scatophagidae

10. **Scathophaga stercoraria (Linnaeus,1758)** *stercoraria* Linnaeus,1758; *merdaria* Fabricius,1794; *asticha* Szilady,1926

Syrphidae

11. **Syrphus vitripennis Meigen,1822** *vitripennis* Meigen,1822

Tachinidae

- 12. *Gonia maculipennis* Egger, 1862** *maculipennis* Egger, 1862
13. *Tachina (Servillia) lurida* (Fabricius, 1781) *lurida* Fabricius, 1781

Bombyliidae

- 14. *Bombylrella atra* (Scopoli, 1763)** *atra* Scopoli, 1763 (fig. 46)

Hymenoptera**Argidae**

- 15. *Arge ochropus* (Gmelin, 1790)** *ochropus* Gmelin, 1790

Cynipidae

The cynipid species collected from Dalbastı and Narlı bridge (northern Kato Mts.) were recently published (Kemal & Koçak, 2010). In this spring two new localities in the western Kato, i.e., Ormancık and Kışlacık were visited by the authors (3, 10, 14, 17 April), and additional cynipid galls were found. Below, more complete cynipid list for Kato Mountains is given. All the cynipid species were kindly identified by Dr. George Melika.

- 16. *Andricus aries* (Giraud, 1859)** *aries* Giraud, 1859 [Cesa News 56: fig. 53]
17. *Andricus askewi* Melika & Stone, 2001 *askewi* Melika & Stone, 2001 [Cesa News 56: figs. 54-55]
18. *Andricus caputmedusae* (Hartig, 1843) *caputmedusae* Hartig, 1843; *gallaecristatae* Henschel, 1876 [Cesa News 56: fig. 56]
19. *Andricus ceconii* Kieffer, 1901 *ceconii* Kieffer, 1901 (fig. 75)
20. *Andricus coriarius* (Hartig, 1843) *coriarius* Hartig, 1843; *lusitanicus* Kieffer, 1900 (fig. 78)
21. *Andricus curtisii* (Müller, 1870) *curtisii* Müller, 1870; *mediterraneae* Trotter, 1901 (fig. 80)
22. *Andricus grossulariae* Giraud, 1859 *grossulariae* Giraud, 1859; *mayri* Wachtl, 1879; *panteli* Kieffer, 1897; *fructuum* Trotter, 1899; *intermedius* Tavares, 1922; *gemellus* Belizin & Maisuradze, 1961 (fig. 76)
23. *Andricus insanus* (Westwood, 1837) *insanus* Westwood, 1837 [Cesa News 56: figs. 60-62] (fig. 74)
24. *Andricus kollari* (Hartig, 1843) *kollari* Hartig, 1843; *circulans* Mayr, 1870; *indigena* Giraud, 1909
25. *Andricus lucidus* (Hartig, 1843) *lucidus* Hartig, 1843; *aestivalis* Giraud, 1859; *lucidoserinaceus* Kieffer, 1901 [Cesa News 56: figs. 21, 22]
26. *Andricus megalucidus* Melika, Stone, Sadeghi & Pujade-Villar, 2004 *megalucidus* Melika, Stone, Sadeghi & Pujade-Villar, 2004 [Cesa News 56: fig. 66]
27. *Andricus moreae* (Graeffe, 1905) *moreae* Graeffe, 1905 [Cesa News 56: figs. 67-68]
28. *Andricus multiplicatus* Giraud, 1859 *multiplicatus* Giraud, 1859 [Cesa News 56: figs. 69-71]
29. *Andricus megatruncicolus* Melika, 2008 *megatruncicolus* Melika, 2008 [Cesa News 56: fig. 79]
30. *Andricus polycerus* (Giraud, 1859) *polycerus* Giraud, 1859; *subterranea* Giraud, 1859; *transversa* Kieffer, 1897; *trinacriae* Stefani, 1906 (fig. 77)
31. *Andricus pseudoaries* Melika, Stone, Sadeghi, 2008 *pseudoaries* Melika, Stone, Sadeghi, 2008 (fig. 81)
32. *Andricus quercuscalicis* (Burgsdorf, 1783) *quercuscalicis* Burgsdorf, 1783; *calicis* Hartig, 1843; *cerri* Beyerinck, 1895; *beyerincki* Trotter, 1899 [Cesa News 56: figs. 74-75]
33. *Andricus sternlichti* Bellido, Pujade-Villar & Melika, 2003 *sternlichti* Bellido, Pujade-Villar & Melika, 2003 [Cesa News 56: fig. 76]
34. *Andricus tomentosus* (Trotter, 1901) *tomentosus* Trotter, 1901 (fig. 79)
35. *Andricus truncicola* (Giraud, 1859) *truncicola* Giraud, 1859 [Cesa News 56: figs. 77-78]
36. *Aphelonyx persica* Melika, Stone, Sadeghi & Pujade-Villar, 2004 *persica* Melika, Stone, Sadeghi & Pujade-Villar, 2004 [Cesa News 56: fig. 80]
37. *Biorhiza pallida* (Olivier, 1791) *pallida* Olivier, 1791; *aptera* Bosc, 1791; *gallaecalveariformis* Anthoine, 1794; *gallaecerebriformis* Anthoine, 1794; *quercusterminalis* Fabricius, 1798; *terminalis* Hartig, 1840; *codinae* Tavares, 1928; *hispanica* Tavares, 1928; *lusitanica* Tavares, 1928
38. *Cynips quercus* (Fourcroy, 1785) *quercus* Fourcroy, 1785; *pubescentis* Mayr, 1881; *ilicis* Kieffer, 1896; *geminus* Belizin & Maisuradze, 1962; *rusanovae* Belizin & Maisuradze, 1962 [Cesa News 56: figs. 83-84]
39. *Cynips quercusfolii* (Linnaeus, 1758) *quercusfolii* Linnaeus, 1758; *scutellaris* Olivier, 1791; *gallaecerasiformis* Anthoine, 1794; *gallaemidoniformis* Anthoine, 1794; *folii* Hartig, 1840; *flosculi* Giraud, 1868; *giraudi* Tschek, 1869; *taschenbergi* Schlechtendal, 1870 [Cesa News 56: figs. 86-87]

- 40. *Neuroterus anthracinus* (Curtis,1838)** *anthracinus* Curtis,1838; *ostreus* Giraud,1859; *ostria* Hartig,1840; *pallicornis* Hartig,1840; *furunculus* Bayerinck,1882 [Cesa News 56: fig. 88]
41. *Neuroterus quercusbaccarum* (Linnaeus,1758) *quercusbaccarum* Linnaeus,1758; *baccarumquercus* Fourcroy,1785; *flavipes* Fourcroy,1785; *pedunculiquercus* Fourcroy,1785; *lenticularis* Olivier,1791; *longipennis* Fabricius,1793; *gallaelenticulatae* Anthoine,1794; *malpighii* Hartig,1840; *interruptor* Hartig,1841; *interruptrix* Hartig,1841; *baccarum* Blanchard,1849; *pedunculi* Dumeril,1860; *striatus* Schenck,1863; *attenuatus* Schenck,1863; *giraudi* Tschek,1869; *histrio* Kieffer,1901; *hispanicus* Tavares,1916; *intermedius* Tavares,1916 [Cesa News 56: fig. 89]
42. *Synophrus politus* Hartig,1843 *politus* Hartig,1843 (fig. 82)

Coleoptera

Carabidae

- 43. *Calosoma sycophanta* (Linnaeus,1758)** *sycophanta* Linnaeus,1758; *severum* Chaudoir,1850 [Cesa News 53: fig. 42]

Buprestidae

- 44. *Capnodis tenebrosa*** [Cesa News 53: fig. 71]
45. *Anthaxia hungarica* [Cesa News 53: fig. 75]

Cleridae

- 46. *Trichodes sexpustulatus*** [Cesa News 53: fig. 124]

Coccinellidae

- 47. *Bulaea lichatschovi* (Hummel,1827)** *lichatschovi* Hummel,1827 [Cesa News 56: fig. 42]
48. *Coccinella* (s.str.) *septempunctata* Linnaeus,1758 *septempunctata* Linnaeus,1758; *brucki* Mulsant,1866
49. *Exochomus quadripustulatus* (Linnaeus,1758) *quadripustulatus* Linnaeus,1758
50. *Harmonia axyridis* (Pallas,1773) *axyridis* Pallas,1773 [Cesa News 56: fig. 43]

Meloidae

- 51. *Muzimes* sp.** [Cesa News 53: fig. 131]

Melyridae

The melyrids of the province is completely unknown. In the area studied some species were found as being gallicol species, associated with some cynipid galls. This case is probably due to their predator larvae (Kemal & Koçak,2010: figs. 44-46). Most of the species in adult stage in Kato were found in April during feeding on flowers of *Pyrus* sp. (Rosaceae).

Cerambycidae

- 52. *Purpuricenus tommasoi* Sama,2001** *tommasoi* Sama,2001 [Cesa News 53: fig. 111]
53. *Purpuricenus wachanrui* Levrat,1858 *wachanrui* Levrat,1858 [Cesa News 53: fig. 112]
54. *Coptosia ganglbaueri* (Pic,1951) *ganglbaueri* Pic,1951

Chrysomelidae

- 55. *Gonioctena fornicata* (Brüggemann,1873)** *fornicata* Brüggemann,1873; *sempunctata* Joakimov,1904

Scarabaeidae

56. Cetonia (s.str.) aurata (Linnaeus,1761) *aurata* Linnaeus,1761; *smaragdus* De Geer,1774; *aenea* Fuessly,1778; *chlorochrysa* Schrank,1776; *viridicoruscus* Voet,1779; *maculata* Scriba,1790; *variabilis* Preyss.,1790; *piligera* Mulsant & Rey,1842; *praeclara* Mulsant & Rey,1842; *clermonti* Bourgin,1948

57. Chromovalgus peyroni (Mulsant & Wachanru,1852) *peyroni* Mulsant & Wachanru,1852

Glaphyridae

58. Amphicoma (Vittateulasia) vittata (Fabricius,1775) *vittata* Fabricius,1775; *lineata* Faldermann,1835; *strigata* Waltl,1838; *smymensis* Castelnau,1840; *syriaca* Kollar & Redtenbacher,1843; *africana* Reitter,1890; *chrysur* Reitter,1890; *decorata* Reitter,1890; *semifulva* Reitter,1890; *lateritia* Reitter,1903; *pseudochrysur* Miksic,1960; *persica* Petrovitz,1963

Curculionidae

59. Attelabris nitens [Cesa News 56: fig. 136]

III - Stray notes on the excursions in April 2010 to the western Kato Mountains in Pervari district (Siirt Province)

In early April, authors visited western Kato in Pervari district in order to observe and collect pterygots. Unfortunately first three attempts on this matter were not succesful. On 17th April, the weather was better in forenoon; therefore photographing and collecting concerning some groups were possible to some degree. In the afternoon, it was stromy but observation and collecting were successful including light trap collecting near rocky slopes covered mainly by *Quercus (libani & brantii)* bushland, with sporadic *Crataegus monogyna*, *Paliurus*, *Rosa*, and *Rhamnus*.

Butterflies in the studied area are few. Totally 13 species were recorded. Recorded moths were much noteworthy. Following families were recorded within 3 hours: *Noctuidae* (*Behounekia*, *Orthosia*, *Egira*, *Autophila*, *Minucia*), *Geometridae*, *Notodontidae* (*Peridea*, *Harpyia*, *Spatalia*), *Thyatiridae*, *Drepanidae*, *Nolidae*, *Ethmiidae*, *Depressariidae*, *Gelechiidae*, *Tortricidae*, *Pyralidae*, *Alucitidae*, *Tineidae*, *Gracillariidae*, *Lithocolletidae*, *Plutellidae*, *Eriocraniidae*, and *Nepticulidae*. Other insects recorded by day are: *Orthoptera* (*Acrotylus*, *Tridactylus*, *Tettix*), *Thysanoptera*, *Hemiptera* (*Lygaeidae*, *Pyrrhocoridae*, *Reduviidae*, *Miridae*, *Tingidae*, *Coreidae*, *Scutellariidae*, *Gerridae*, *Corixidae*), *Neuroptera* (*Hemerobiidae*, *Chrysopidae*), *Diptera* (*Bombyliidae*, *Syrphidae*, *Tachinidae*, *Hybotidae*, *Bibionidae*, *Tephritidae*), *Hymenoptera* (*Chalcidoidea*, *Cynipidae*, *Vespidae*, *Mutillidae*, *Apidae*, *Ichneumonidae*, *Pompilidae*, *Argidae*, *Formicidae*, etc.), *Coleoptera* (*Scarabaeidae*, *Elateridae*, *Melyridae*, *Cantharidae*, *Coccinellidae*, *Chrysomelidae*, *Curculionidae*, etc.). Following groups were attracted by light trap (160W mecury vapour lamp): *Orthoptera* (*Acrididae*: *Anacridium aegyptium*), *Hemiptera* (*Miridae*), *Hymenoptera* (*Ichneumonidae*), *Diptera* (*Psychodidae*, *Tipulidae*, *Limoniidae*, *Anthomyiidae* and other Nematoceran flies), *Coleoptera* (*Scarabaeidae*).

The collected specimens have been preparing by the authors as museum materials. Their full lists will be published in separate articles after completing their identifications.

Illustrations and their explanations are presented below under two titles, "Kato and studying there", and "Spring insects of western Kato":

Kato and studying there



Fig. 2 - Kato, northern parts from vicinity Büyükağaç, 14 4 2010, photo M. Kemal (Cesa)



Fig. 3 - Atlıhan gorge near the border of Siirt –Van provinces. On the left Gitgel Mountains, its upper heights with snow, on the right Kato Mountains. 14 4 2010, photo M. Kemal (Cesa).



Fig. 4 - Western slopes of Kato in the district Pervari. Most of the area is currently completely unsafe. Military documents obtainable under special circumstances for limited time but at the expenses of life, 10 4 2010 photo M. Kemal (Cesa).



Fig. 5 - The area is under control by the Turkish Air Forces daily, 14 4 2010 photo A. Koçak (Cesa)



Fig. 6 - In this desolate place, the authors carry out their researches with resolution and courage, 10 4 2010 photo M. Kemal (Cesa)



Fig. 7 - In this desolate place, the authors carry out their researches with resolution and courage, 10 4 2010 photo A. Koçak (Cesa)



Fig. 8 - Mansur gorge at western Kato, Pervari district, 17 4 2010, photo M. Kemal (Cesa)



Fig. 9 - South West of Kato Mountains, Pervari district, 17 4 2010, photo M. Kemal (Cesa)

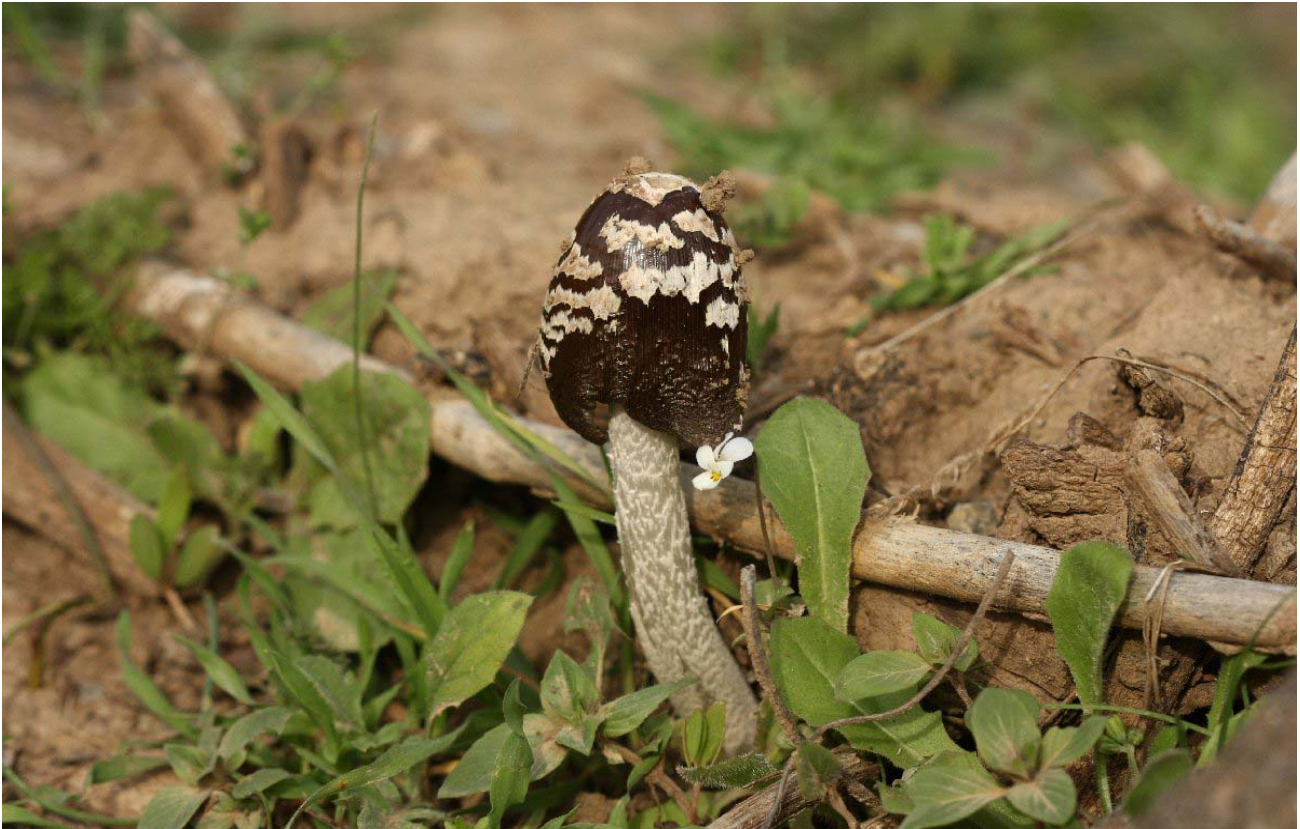


Fig. 10- *Coprinopsis picacea* (*Psathyellaceae*) a beautiful but inedible mushroom at western Kato, 1320m, 17 4 2010 photo M. Kemal [the species is kindly determined by Prof. Dr. Kenan Demirel]



Fig. 11 - Probably *Exidia truncata* (*Tremellaceae*) an interesting but inedible mushroom at western Kato, 1320m, 14 4 2010 photo M. Kemal [the species is kindly determined by Prof. Dr. Kenan Demirel]



Figs. 12, 13 - Preparing light trap at Kato, 17 4 2010, photo A.Koçak (Cesa)



Figs. 14, 15 - Preparing light trap at Kato, 17 4 2010, photo M.Kemal (Cesa)



Figs. 16, 17 - Working with the light trap at the beginning, 17 4 2010 A.Koçak (Cesa)

Spring insects of western Kato



Fig. 18 - A pamphagid nymph (*Pamphagidae*) at western Kato, 1600m 17 4 2010, photo M.Kemal (Cesa)



Fig. 19 - A *Tetrax* species (*Tetrigidae*) at western Kato, in damp places 1600m 17 4 2010, photo M.Kemal (Cesa)



Fig. 20 - A *Tridactylus* species (*Tridactylidae*) at western Kato, in damp places 1600m 17 4 2010, photo M.Kemal (Cesa)



Fig. 21 - A *Forficula* species (*Forficulidae*) in nest. From Dalbasti 1650m (northern Kato) 28 2 2010 photo M.Kemal (Cesa)



Fig. 22 - Eggs of a *Forficula* species (*Forficulidae*) in nest. From Dalbastı 1650m (northern Kato) 28 2 2010 photo M.Kemal (Cesa)



Fig. 23 - A nymph of *Mustha* sp. (*Pentatomidae*) on *Quercus* trunk at Dalbastı 1650m (northern Kato), 3 4 2010 photo M. Kemal (Cesa)



Fig. 24 - *Rhyparochromus phoeniceus* (Lygaeidae) on the ground among grasses and debris. Several specimens observed, 1320m. 17 4 2010, photo M. Kemal (Cesa)



Fig. 25 - *Spilosthetus saxatilis* (Lygaeidae) on the ground among grasses and debris, 1320m. 17 4 2010, photo M. Kemal (Cesa)



Fig. 26 - *Corizus hyascyami* (Rhopalidae) on the ground among grasses and debris, 1320m. 17 4 2010, photo M. Kemal (Cesa)



Fig. 27 - *Pyrrhocoris apterus* (Pyrrhocoridae) on the ground among grasses and debris, 1320m. 17 4 2010, photo M. Kemal (Cesa)



Fig. 28 - *Peirates hybrida* (or *strepitans*) (Reduviidae) captured at western Kato (1320m), 17 4 2010. Stung finger after 24 hours, photo M. Kemal (Cesa)



Fig. 29 - *Syromastes rhombeus* (Coreidae), western Kato, 1320m 17 4 2010, photo M. Kemal (Cesa)



Fig. 30 - A mirid specimen (?*Plagiognathus*) (*Miridae*) at western Kato , 1320m 14 4 2010 photo M.Kemal (Cesa)



Fig. 31 - A *Geocoris* sp. (*Miridae*) a gallicol species on the gall of *Andricus multiplicatus* (*Cynipidae*), Narlı bridge (northern Kato) 1410m 14 3 2010, photo M.Kemal (ex coll. Cesa)



Fig. 32 - A corixid species at the bottom of the puddle at western Kato, 1610m, 17 4 2010 photo M. Kemal (Cesa)



Fig. 33 - A *Gerris* species (*Gerridae*) at the water surface of the puddle at western Kato, 1610m, 17 4 2010 photo M. Kemal (Cesa)



Fig. 34 - A nymph of Delphacid species at Dalbasti 1650m on *Quercus libani*, 3 4 2010 photo M.Kemal (Cesa)



Fig. 35 - Pupal skins of a gallicol *Hemerobius* species (*Hemerobiidae*) left on old gall of *Andricus askewi* (*Cynipidae*) and preserved an adult from western Kato 1320m 3 4 2010, Pervari district, photo M.Kemal (Cesa) ¹



Fig. 36 - Pupal skins of a gallicol *Hemerobius* species (*Hemerobiidae*) left on old gall of *Andricus coriarius* (*Cynipidae*) and preserved an adult from western Kato 1320m 3 4 2010, Pervari district, photo M.Kemal (Cesa)²



Fig. 37 - A *Chrysopa* sp. (*Chrysopidae*) adult and larva gallicol on the gall of *Andricus lucidus* (*Cynipidae*) obtained in captivity on 20 4 2010; originally from western Kato, Pervari district 1320 3 4 2010, photo M. Kemal (Cesa)³



Fig. 38 - A male limoniid at rest from Dalbastı 1650m (northern Kato) 29 3 2010 photo M.Kemal (Cesa)



Fig. 39 - *Bibio marci* (Bibionidae) at western Kato, 1320m 14 4 2010, photo M. Kemal (Cesa)



Fig. 40 - *Eupeodes corollae* (Syrphidae) at western Kato, Pervari district, 1320m 14 4 2010, photo M. Kemal (Cesa)



Fig. 41 - *Syrphus* aff. *vitripennis* (Syrphidae) at western Kato, 1320m 14 4 2010, photo M. Kemal (Cesa)



Fig. 42 - *Episyrphus balteatus* (Syrphidae) at western Kato 1240 m 3 4 2010 photo M.Kemal (Cesa)



Fig. 43 - *Sphaerophoria scripta* (Syrphidae) on *Senecio* flower, western Kato, 1320m 17 4 2010 photo M.Kemal (Cesa)



Fig. 44 - *Acanthiophilus helianthi* (male) (*Tephritidae*) captured at light trap, western Kato 1155m 17 4 2010, photo M.Kemal (ex coll. Cesa)⁴



Fig. 45 - *Bombylrella* aff. *simulans* (*Bombyliidae*) at rest from western Kato, Pervari district, 17 4 2010, photo M. Kemal (Cesa)⁵



Fig. 46 - *Bombylrella atra* (Bombyliidae) from Dalbastı 1600m (northern Kato) 30 5 2009, photo M.Kemal (Cesa)



Fig. 47 - *Tachina lurida* (Tachinidae) from Dalbastı 1650m (northern Kato) 3 4 2010, photo M. Kemal (Cesa)



Fig. 48 - *Gonia maculipennis* (Tachinidae) from Atlihan 1200m (northern Kato) 23 3 2010, photo M. Kemal (Cesa)



Fig. 49 - An hybotid fly (female) on *Ranunculus* (Ranunculaceae) flower, western Kato, 17 4 2010 photo M.Kemal (Cesa)



Fig. 50 - An hybotid fly (male) on *Senecio* (*Asteraceae*) flower, western Kato, 17 4 2010 photo M.Kemal (Cesa)



Fig. 51 - *Tipula lateralis* in copula (*Tipulidae*), an early spring fly at western Kato, 25 3 2010 photo M.Kemal (Cesa)

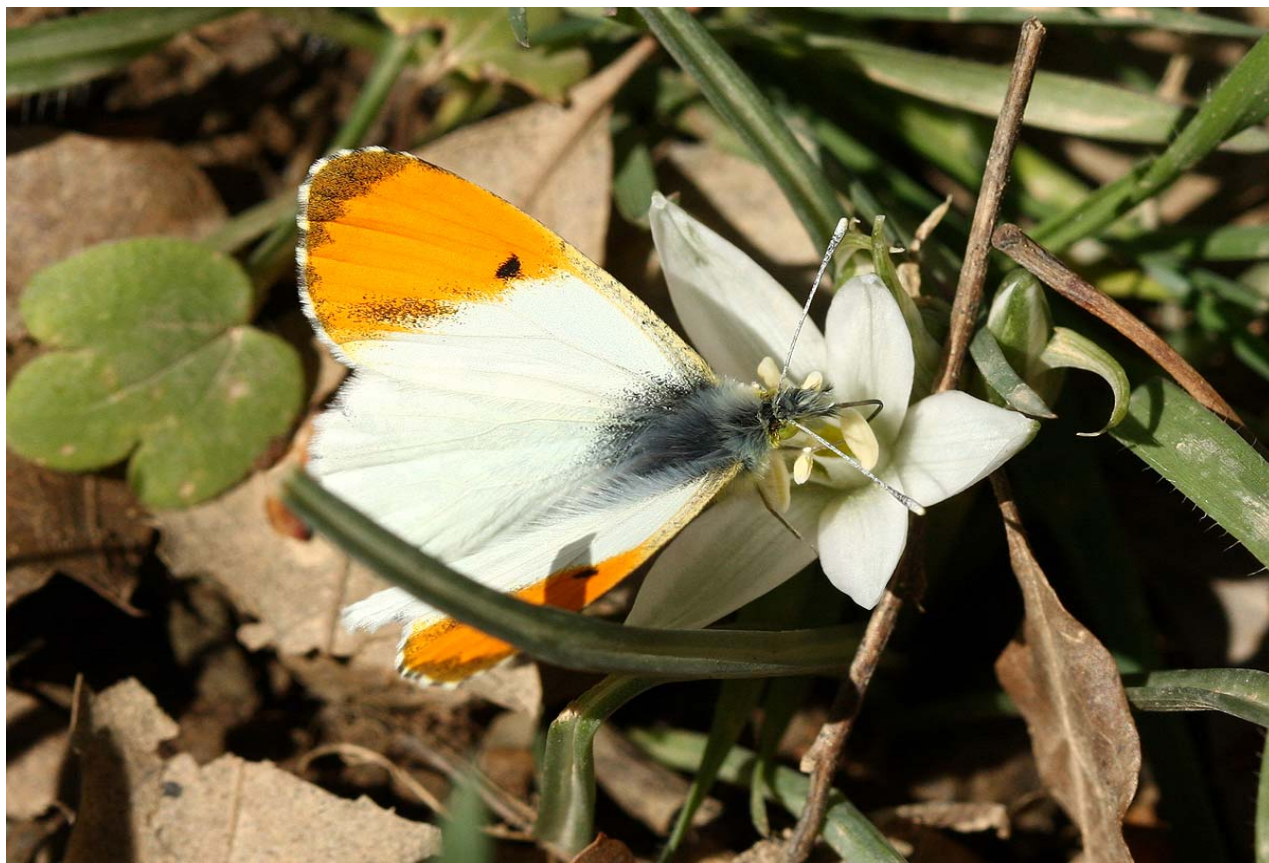


Fig. 52 - *Anthocharis cardamines* referable to *ssp.phoenissa* (Pieridae), a male feeding on *Ornithogalum* sp. at western Kato, 14 4 2010 photo M.Kemal (Cesa)



Fig. 53 - *Anthocharis cardamines* (Pieridae), a female feeding on a flower of Brassicaceae at western Kato, 14 4 2010 photo M.Kemal (Cesa)



Fig. 54 - *Nymphalis polychloros* (Argynniidae) a basking butterfly after hibernation at Dalbastı 1650m (northern Kato), 3 4 2010, photo M.Kemal (Cesa)

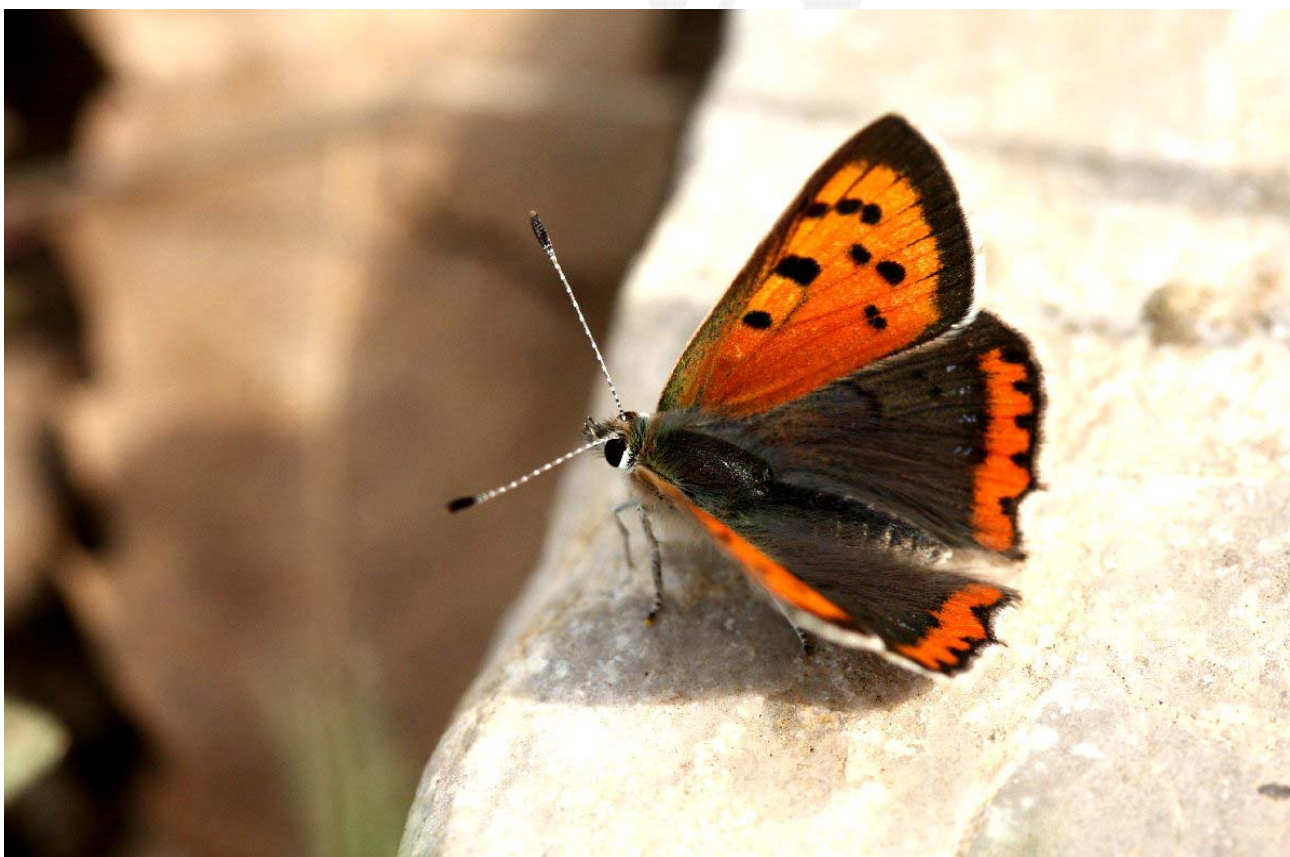


Fig. 55 - *Lycaena phlaeas* (Lycaenidae), a basking butterfly at western Kato, 1320m, 17 4 2010 photo M.Kemal (Cesa)



Fig. 56 - Vandenizi Güzeli (*Axia theresiae shelhornae*) (*Cimeliidae*) a resting male, Dalbastı 1400m (northern Kato), 28 5 2005 photo M. Kemal (Cesa)



Fig. 57 - A wingless female of an ennomid, *Apocheima* ? sp. (*Geometridae*) at Dalbastı 1650m (northern Kato) 3 4 2010 photo M. Kemal (Cesa)



Fig. 58 - A pupa (*Pammene amygdalana*) (*Tortricidae*) from a gall of *Aphelonyx persica* on *Quercus*, Dalbastı 1650m (northern Kato) 15 4 2010, observed in laboratory & photo M.Kemal (Cesa)



Fig. 59 - Adult moth (*Pammene amygdalana*) (*Tortricidae*) from a gall *Aphelonyx persica* on *Quercus*, Dalbastı 1650m (northern Kato) 15 4 2010, observed in laboratory & photo M.Kemal (Cesa)⁶



Fig. 60 - Adult moth (*Pammene gallicolana*) (*Tortricidae*) emerged on 29 3 2010 from the gall of *Andricus moreae* (*Cynipidae*) from Dalbastı 1650m (northern Kato), photo M.Kemal (Cesa) ⁷



Fig. 61 - Pupa of an unidentified female (*Tortricidae*) emerged on 29 3 2010 from gall *Andricus polycerus* (*Cynipidae*), Dalbastı 1650m (northern Kato), photo M.Kemal (Cesa)



Fig. 62 - An unidentified female (*Tortricidae*) emerged on 29 3 2010 from the gall of *Andricus polycerus* (*Cynipidae*), Dalbastı 1650m (northern Kato), photo M.Kemal (Cesa)



Fig. 63 - Full grown caterpillar of *Ethmia* sp. (*Ethmiidae*) from western Kato 1320m 13 4 2010, photo M.Kemal (Cesa)



Fig. 64- Preparation of the cocoon by the caterpillar of *Ethmia* sp. (*Ethmiidae*) from western Kato 1320m 18 4 2010, photo M.Kemal (Cesa)



Fig. 65 - Full grown larva of *Amata hakkariana* (*Ctenuchidae*) from Dalbastı 1650m (northern Kato) 29 3 2010 photo M.Kemal (Cesa)



Fig. 66- Pupa of *Amata hakkariana* in cocoon (*Ctenuchidae*) from Dalbastı 1650m (northern Kato), pupation: 4 April, photo M.Kemal (Cesa)



Figs. 67, 68 - Male pupa of *Amata hakkariana* (left dorsal, right ventral). Date of pupation 4 April 2010, photo M.Kemal (Cesa)



Fig. 69 - *Amata hakkariana*, newly hatched male, 18 4 2010, photo M.Kemal (Cesa)

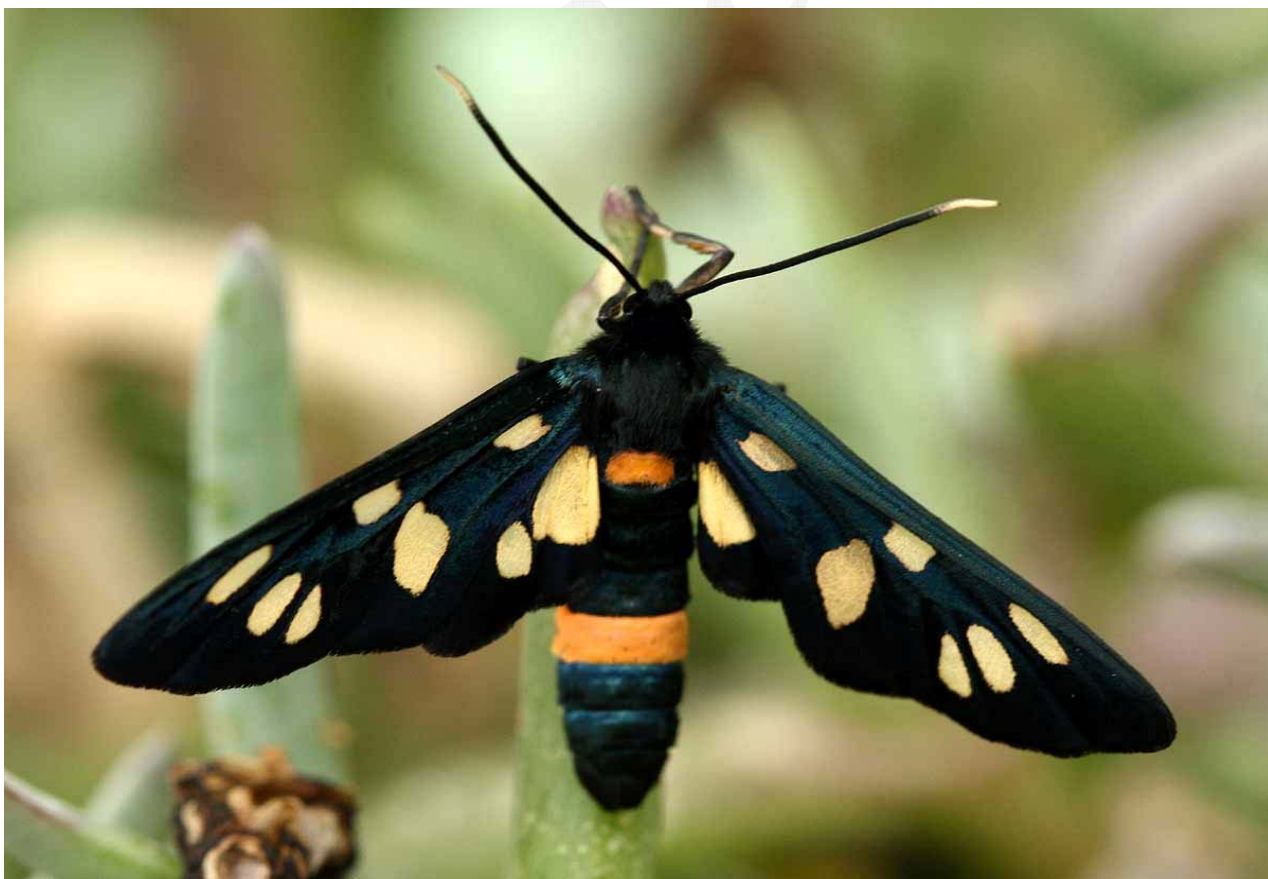


Fig. 70 - *Amata hakkariana*, newly hatched male, 18 4 2010, photo M.Kemal (Cesa)

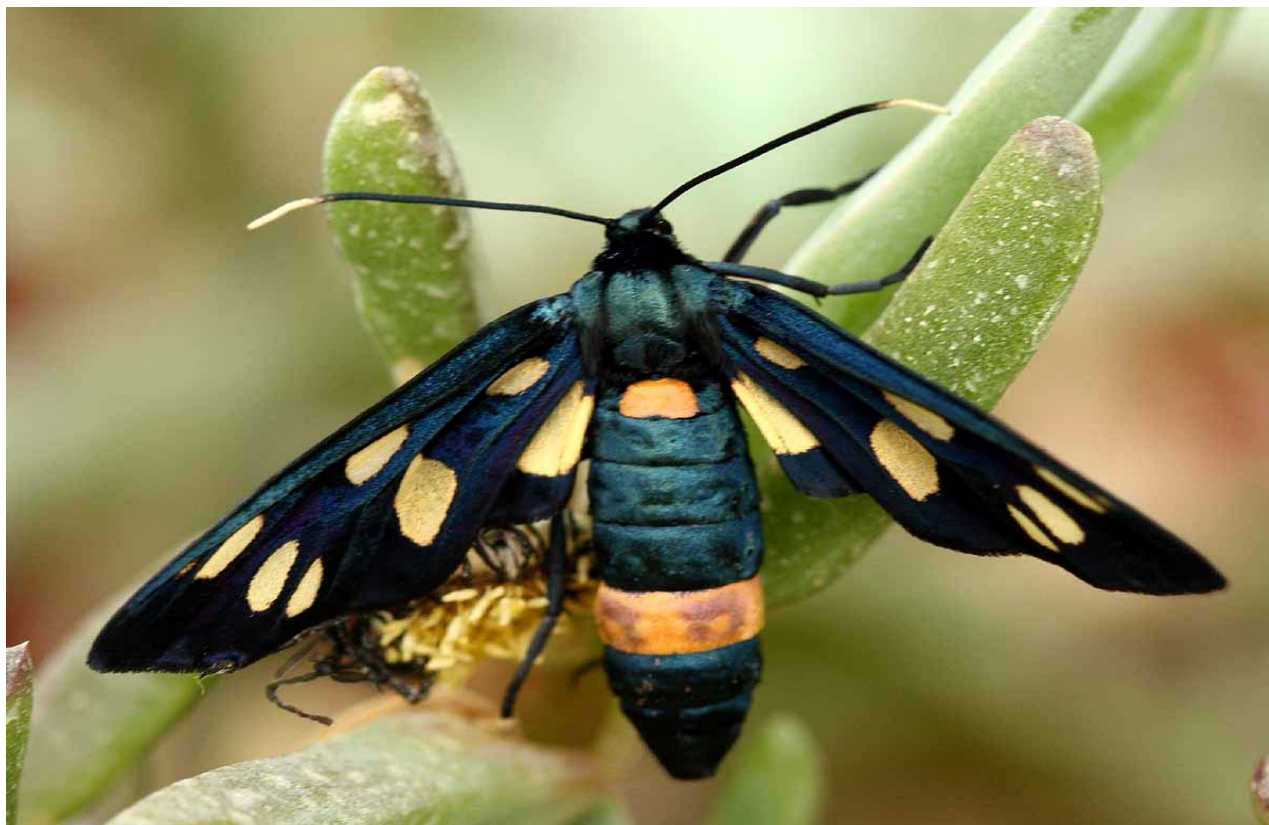


Fig. 71- *Amata hakkariana*, newly hatched female, 18 4 2010, photo M.Kemal (Cesa) ⁸



Fig. 72- *Arge ochropus* (Argidae) at Dalbastı 1650m (northern Kato), 29 3 2010 photo M.Kemal (Cesa)



Fig. 73- A pompilid wasp (*Pompilidae*) on *Quercus libani* leaf at Dalbasti 1650m (northern Kato), 29 3 2010 photo M.Kemal (Cesa)



Fig. 74- Cynipid galls are represented by interesting species in Kato Mountains. *Andricus insanus* from western Kato 1600m, 17 4 2010, photo M.Kemal (Cesa)



Fig. 75 - Gall of *Andricus ceconii* (Cynipidae) [det. Dr. Melika] from western Kato, Pervari district 1240m, 3 4 2010, photo M.Kemal (Cesa)



Fig. 76 - Gall of *Andricus grossulariae* (Cynipidae) [det. Dr. Melika] from western Kato, Pervari district 1240m, 3 4 2010, photo M.Kemal (Cesa)



Fig. 77 - Gall of *Andricus polycerus* (Cynipidae) [det. Dr. Melika] from western Kato, Pervari district 1240m, 3 4 2010, photo M.Kemal (Cesa)

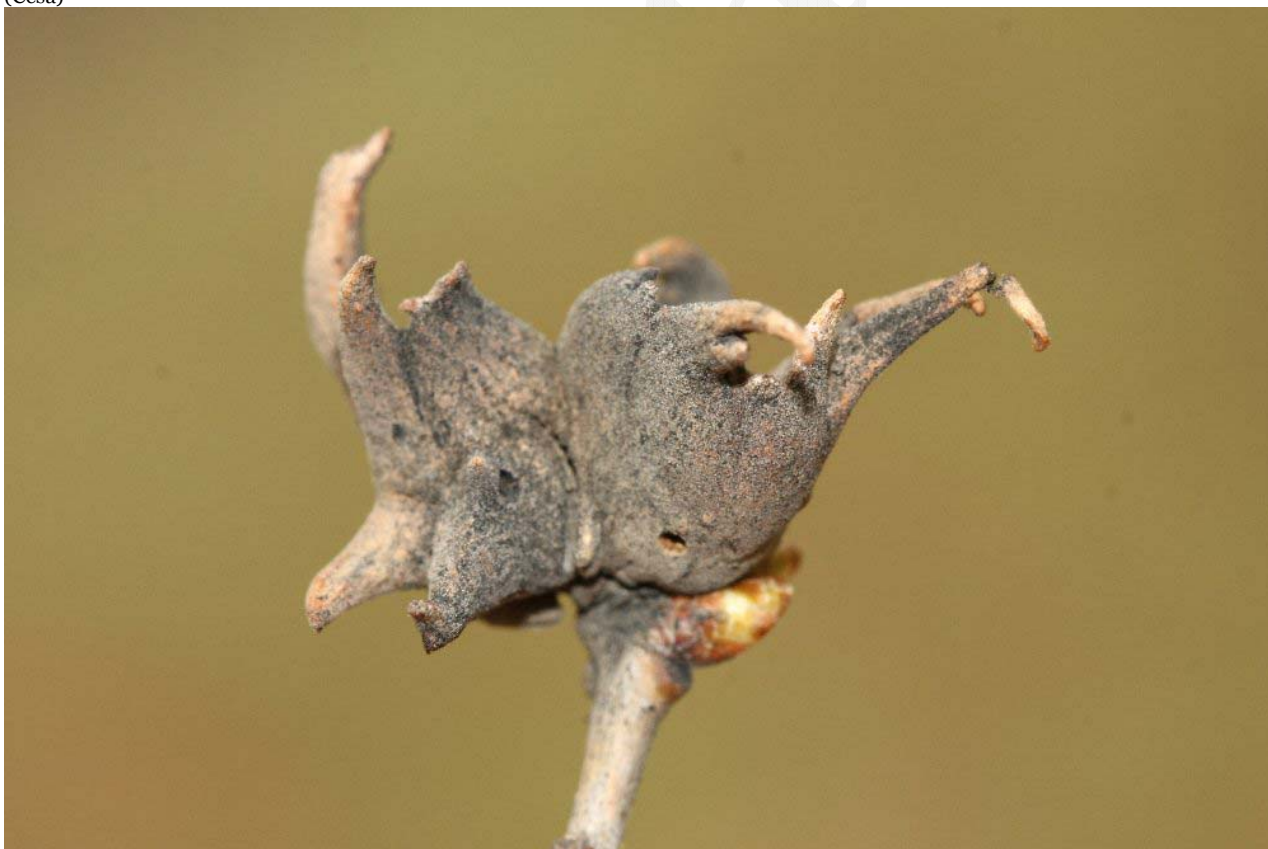


Fig. 78 - Gall of *Andricus coriarius* (Cynipidae) [det. Dr. Melika] from western Kato, Pervari district 1240m, 3 4 2010, photo M.Kemal (Cesa)

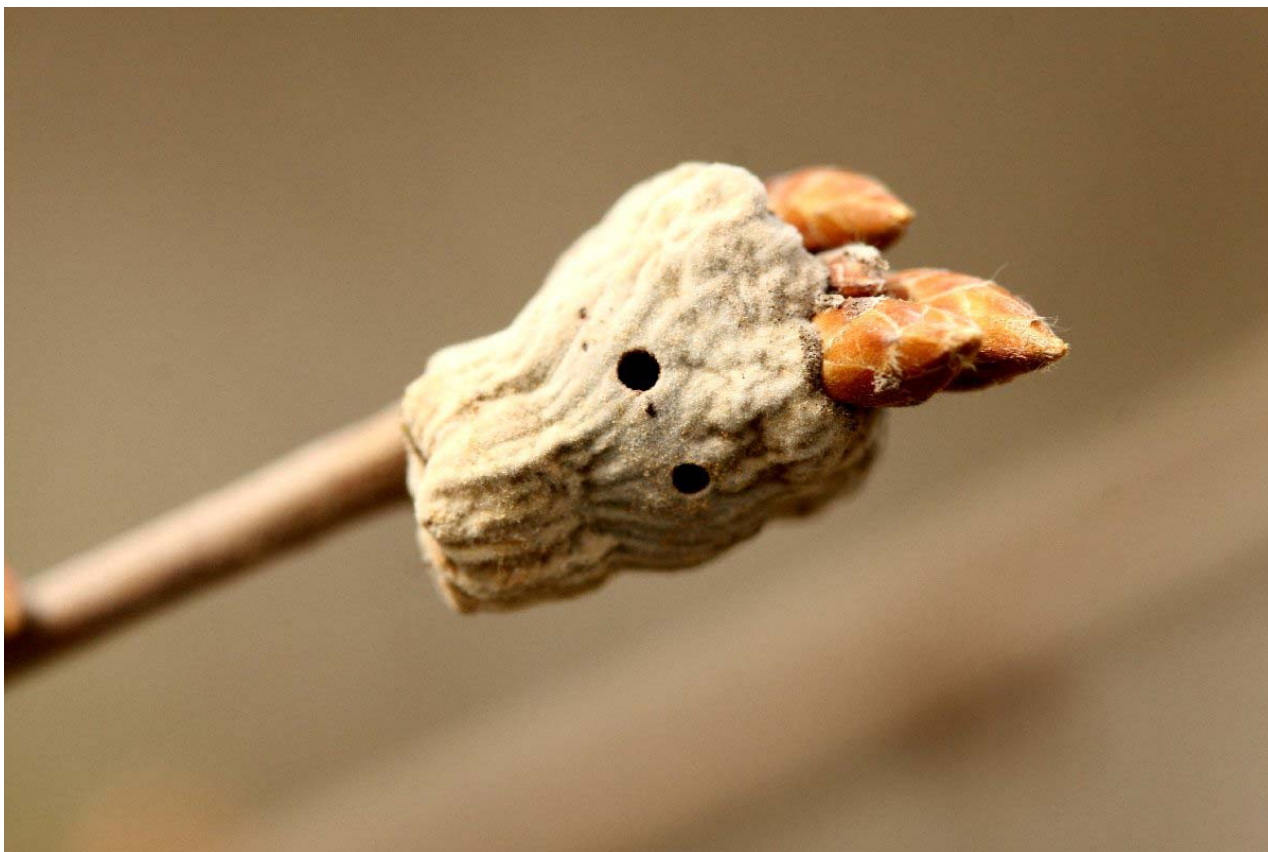


Fig. 79 - Gall of *Andricus tomentosus* (Cynipidae) [det. Dr. Melika] from western Kato, Pervari district 1240m, 3 4 2010, photo M.Kemal (Cesa)



Fig. 80 - Gall of *Andricus curtisii* (Cynipidae) [det. Dr. Melika] from western Kato, Pervari district 1240m, 3 4 2010, photo M.Kemal (Cesa)



Fig. 81 - Gall of *Andricus pseudoaries* (Cynipidae) [det. Dr. Melika] from western Kato, Pervari district 1240m, 3 4 2010, photo M.Kemal (Cesa)



Fig. 82 - Gall of *Synophrus politus* (Cynipidae) [det. Dr. Melika] from western Kato, Pervari district 1240m, 3 4 2010, photo M.Kemal (Cesa)



Fig. 83 - A *Torymus* female (*Torymidae*) on *Quercus* (*Fagaceae*), at western Kato 1320m, Pervari district 14 4 2010 photo M.Kemal (Cesa)



Fig. 84 - *Sycophila biguttata* (*Encyrtidae*) a chalcidoid parazitoid obtained from the gall of *Andricus lucidus* (*Cynipidae*) from western Kato 1320m 3 4 2010 photo M.Kemal (Cesa) – New to Siirt Province!



Fig. 85 - A *Megastigmus* female (*Torymidae*) a chalcidoid parasitoid obtained from the gall of *Andricus lucidus* (*Cynipidae*) from western Kato 1320m 3 4 2010 photo M.Kemal (Cesa) – New to Siirt Province!



Fig. 86 - *Malachius aeneus* (*Melyridae*) ready to fly at western Kato, 1320m 14 4 2020, photo M.Kemal (Cesa)



Fig. 87 - *Malachius aeneus* (Melyridae) at western Kato, 1320m 14 4 2020, photo M.Kemal (Cesa)



Fig. 88- A melyrid beetle (Melyridae) on *Pyrus* tree at western Kato, 1240m 3 4 2020, photo M.Kemal (Cesa)

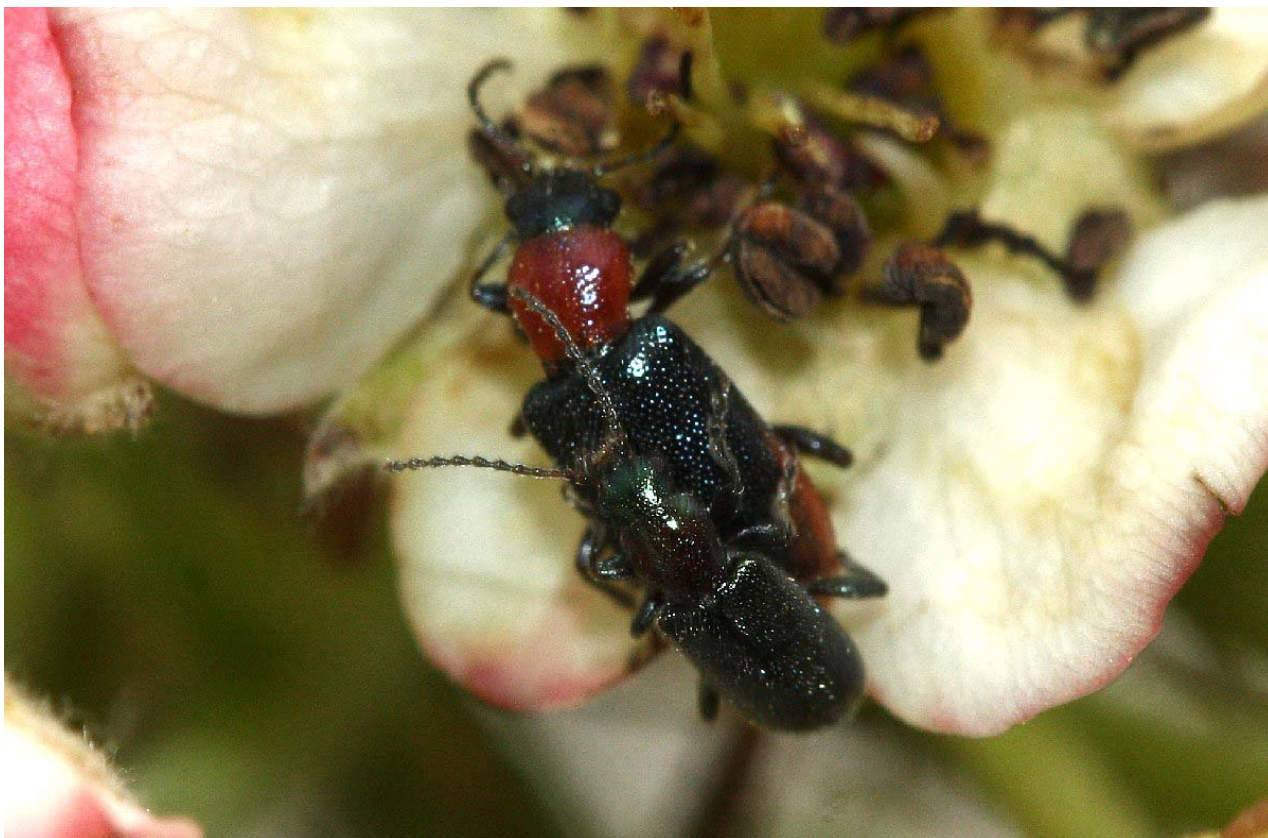


Fig. 89 - A melyrid beetle (*Melyridae*) in copula at western Kato, 1240m 3 4 2020, photo M.Kemal (Cesa)

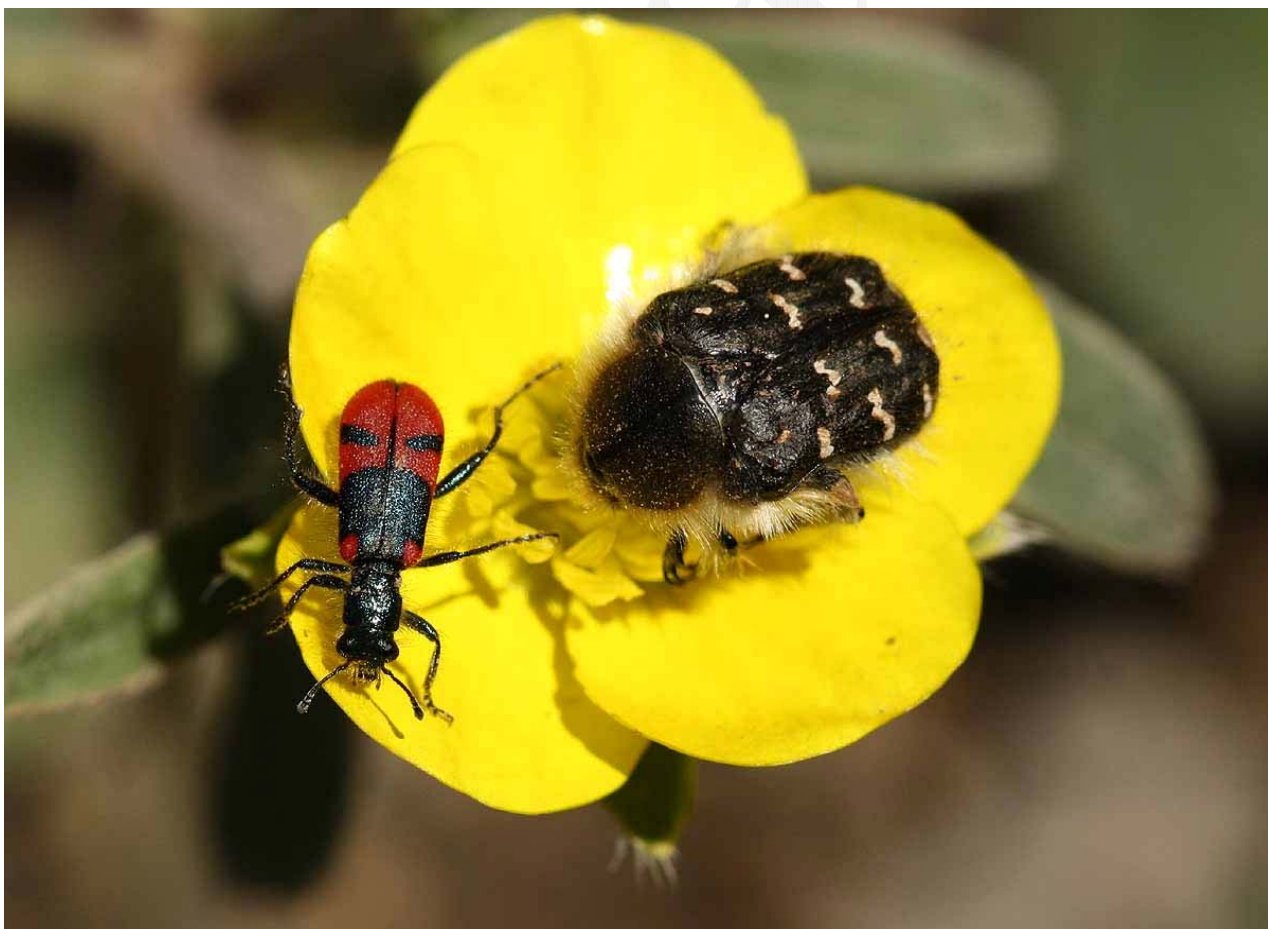


Fig. 90 - A clerid and scarabaeid beetles on *Ranunculus* flower at western Kato, 1240m 14 4 2020, photo M.Kemal (Cesa)

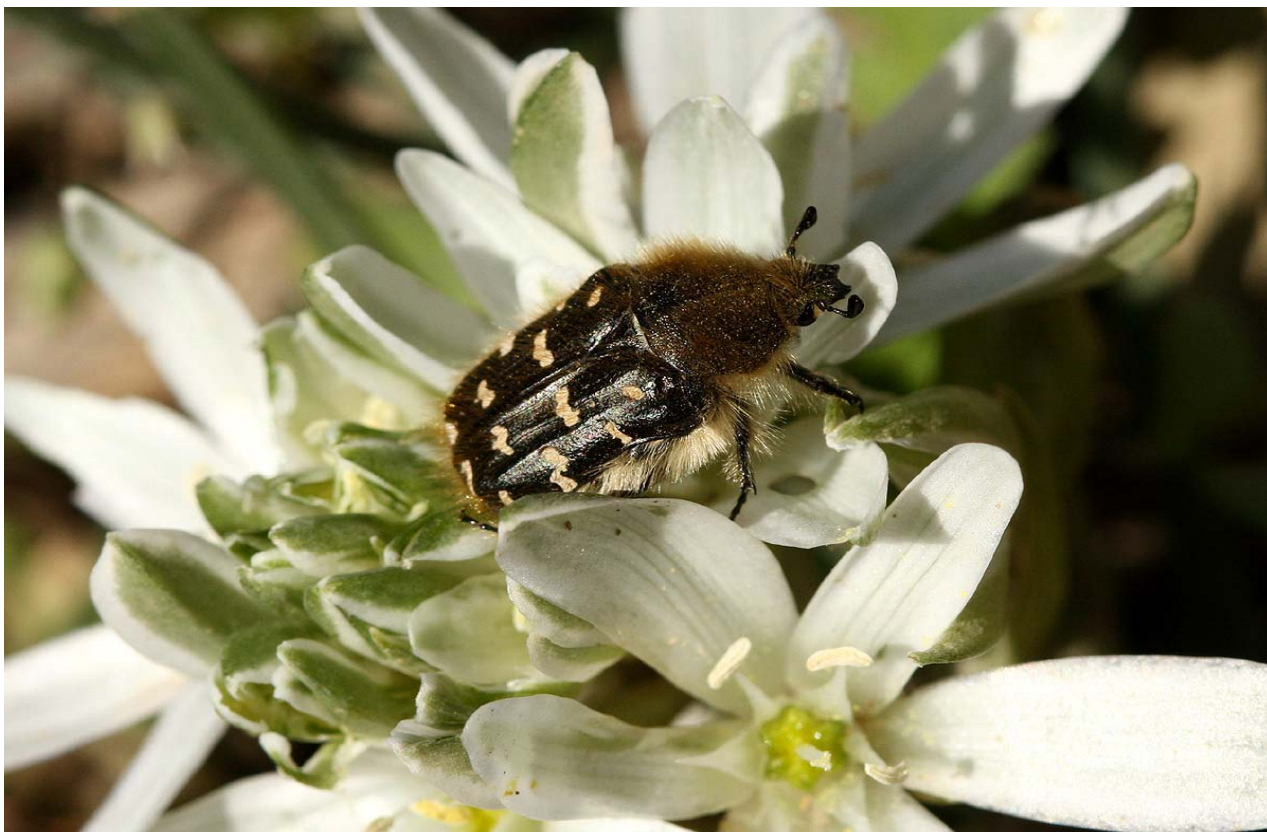


Fig. 91 - *Tropinota squalida* (Scarabaeidae) at western Kato, 1320m 14 4 2020, photo M.Kemal (Cesa)



Fig. 92 - *Onthophagus* sp. (Scarabaeidae) at western Kato, 1320m 14 4 2020, photo M.Kemal (Cesa)



Fig. 93 - *Goniocetena fornicata* (Chrysomelidae) at western Kato, 1320m 14 4 2020, photo M.Kemal (Cesa)



Fig. 94 - A curculionid, sitting the gall of *Quercus* at western Kato, 1320m 10 4 2020, photo M.Kemal (Cesa)



Fig. 95 - *Bulaea lichatschovi* (Coccinellidae) at western Kato, 1240m 10 4 2010 photo M. Kemal (Cesa)



Fig. 96 - *Coccinella septempunctata* in copula (Coccinellidae) at western Kato, 1320m 17 4 2010 photo M. Kemal (Cesa)



Fig. 97 - *Exochomus quadripustulatus* (Coccinellidae) in copula at western Kato, 1320m 17 4 2010 photo M. Kemal (Cesa)

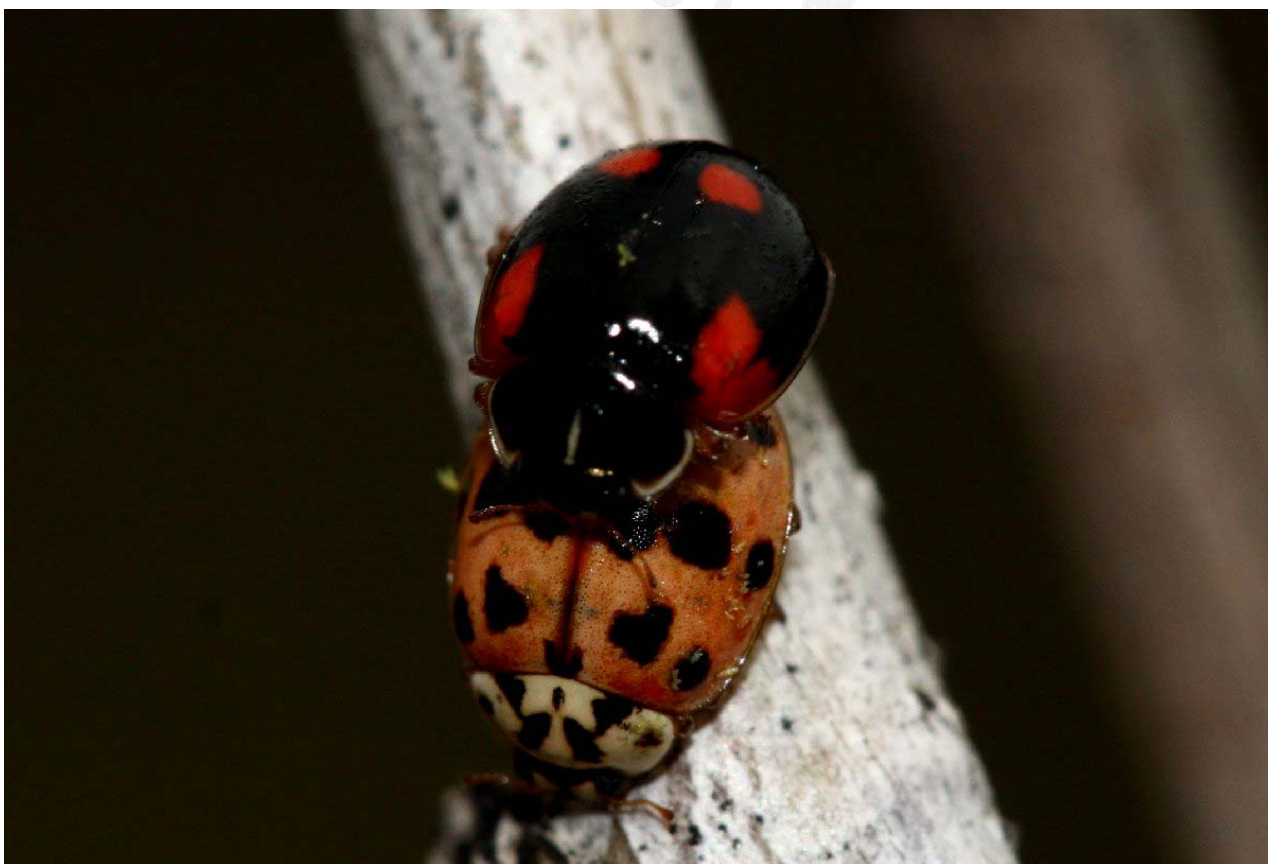


Fig. 98 - An unusual copulation by *Bulaea lichatschovi* and *Exochomus quadripustulatus* (Coccinellidae), western Kato, 1240m 3 4 2010, photo M.Kemal (Cesa)



Fig. 99 - *Adalia decempunctata* (Coccinellidae) at Dalbastı 1650m (northern Kato) 3 4 2010 photo M. Kemal (Cesa)



Fig. 100 - *Mordella* sp. (Mordellidae) at western Kato, 1320m 17 4 2010 photo M. Kemal (Cesa)

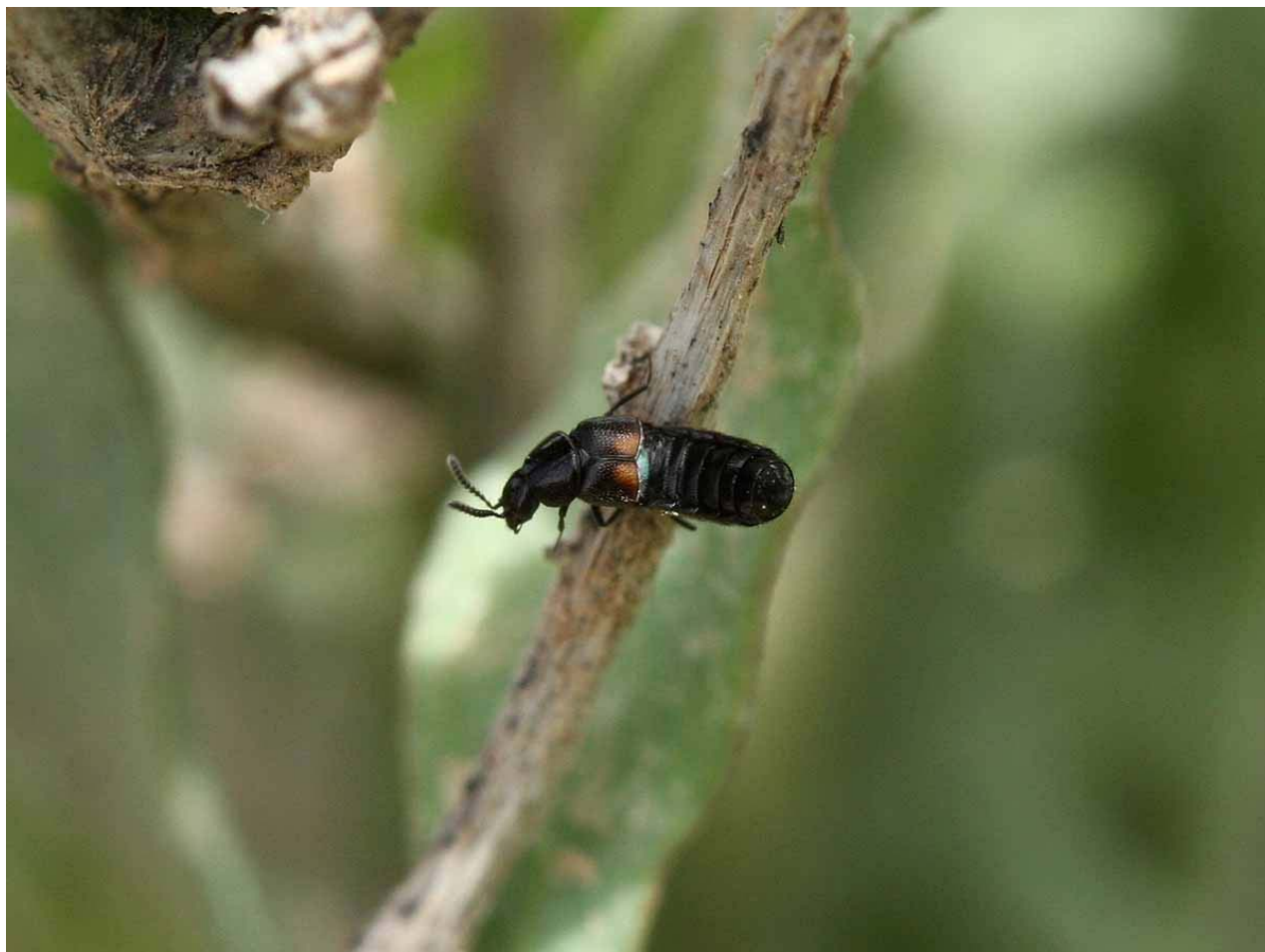


Fig. 101 - A staphylinid at western Kato, Pervari district, 1320m 17 4 2010 photo M. Kemal (Cesa)



Fig. 102 - An elaterid beetle on *Quercus*, at western Kato, Pervari district 1320m 17 4 2010 photo M.Kemal (Cesa)



Figs. 103-107 - Food preference of a melyrid beetle: Top left a killed syrphid; top right a *Malachius aeneus* looks for food; below left *M. aeneus* checks up the killed fly; below middle & right; *M. aeneus* prefers not to eat the fly. All the images are from western Kato, 1320m, 17 4 2010, by M. Kemal (Cesa)

References

- Kemal, M. & A.Ö. Koçak**, 2005, Annotated Checklist of the Lepidoptera of Çatak Valley (Van Province, Turkey), Part I. Cent. ent. Stud., Priamus 11 (3): 29-58.
- Kemal, M. & A.Ö. Koçak**, 2006, A new genus and a new species of Ascalaphidae for the fauna of Turkey (Planipennia). Cent. ent. Stud., Misc. Pap. 99: 1-3, 2 figs.
- Kemal, M. & A.Ö. Koçak**, 2010, Winter trips to south Van Lake and the cynipid galls on oaks (Hymenoptera, Cynipidae). Cesa News 56: 1-66, 90 figures, 1 table, 22 maps. <http://www.archive.org/details/CentreForEntomologicalStudiesAnkaraCesaNewsNr.56>
- Koçak, A.Ö. & M. Kemal**, 2002, Faunistik taksonomik ve zoocoğrafik notlarla Çatak kelebekleri (Papilionoidea, Hesperioidea, Lepidoptera). Cent. ent. Stud., Misc. Pap. 82/85: 1-32, figs.
- Koçak, A.Ö. & M. Kemal**, 2007, Revised and annotated checklist of the Lepidoptera of Turkey. Priamus Suppl. 8: 1-150, 2 Tables.
- Koçak, A.Ö. & M. Kemal**, 2009, List of the coleopteran genera and species recorded in Turkey based upon the Info-system of the Cesa. Cesa News 53: 1-212, 145 figs. <http://www.archive.org/details/CentreForEntomologicalStudiesAnkaraCesaNewsNr.53>
- Koçak, A.Ö. & M. Kemal**, 2010, List of the species of some pterygot orders recorded in the Province Van (East Turkey) and a description of a new species in the family Cicadidae (Insecta). Priamus 12 (5): 130-149. <http://www.archive.org/details/CentreForEntomologicalStudiesAnkaraPriamus125>

Notes

¹ From the old galls of various cynipids (*Hym.*) preserved in captivity, the authors obtained numerous hemerobiid adults. In earlier publication (Kemal & Koçak 2010), various species of *Hemerobiidae* were recorded from the old galls of *Andricus kollari* and *Andricus multiplicatus* (op.cit., figs. 35-37). This time, six exarate pupal skins and adults were obtained from old gall of *Andricus askewi* (*Hym., Cynipidae*) [new record!]. The larvae of hemerobiids are the predators on aphids, small acari etc. found nearby or on the galls. Probably for that reason the hemerobiids are associated with the cynipid galls on oaks. During this survey, obtained hemerobiids are preserved pinned, or in alcohol for further studies.

² *Andricus coriarius* (*Cynipidae*) is also a new gall for gallicol hemerobiid species [see above].

³ *Chrysopa* larva found on the gall of *Andricus multiplicatus* (*Cynipidae*) was reported by the authors (Kemal & Koçak, 2010) from Narlı bridge (northern Kato) collected 14 3 2010. This time, the larva and its adult was obtained from the gall of *Andricus lucidus* at western Kato in Pervari district. larvae of *Chrysopa* species, like hemerobiid species, are gallicol insects and these gall records are new to science!

⁴ *Acanthiophilus helianthi* is recorded in Siirt Province for the first time.

⁵ The genus *Bombylella* Greathead is represented by a single species (*atra* Scopoli) in Turkey. It is found in Van Prov. (Erek Mountain) by the authors last year [Cesa News 51: fig. 21]. This is probably the second species of the genus which is closer to *Bombylella simulans* Austen, known from Palestine, Lebanon and Jordan so far. On this subject, a separate study will be published.

⁶ Four specimens of *Pammene amygdalana* obtained from various galls collected by M. Kemal from Van Province, Çatak, Dalbastı 1600m two specimens ex one gall *Aphelonyx persica* (*Cynipidae*); from Bitlis Province, Mutki 1400m two specimens ex two different galls *Andricus polycerus* (*Cynipidae*). The moth is new record for these provinces. The host galls, *Aphelonyx persica* and *Andricus polycerus* (*Cynipidae*) are also new records!

⁷ During observations of the first author in her laboratory, *Pammene gallicolana* emerged on 29 3 2010 from the gall *Andricus moreae* (*Cynipidae*) collected on 14 3 2010 from Dalbastı 1650m (northern Kato) (Van Province). This record of host gall is new to science! Previously this species was reported by the authors from the galls of *Andricus multiplicatus* (*Cynipidae*) and *Aceria salicina* (*Eriophyiidae*) (see Kemal & Koçak, 2010 [Table 1 & fig.47]).

⁸ Totally 5 caterpillars of *Amata hakkariana* were collected by M.Kemal from Narlı bridge (1410m) and Dalbastı oakland (1650m) at the northern Kato on 29 March 2010. Several days, the caterpillars were reared in captivity with *Taraxacum* foliages. They pupated in early April. On 18 and 20 April, 4 ♂ 1 ♀ were hatched successfully. The caterpillar, pupa, and the cocoon are illustrated here for the first time. This species is known only from Hakkari and Van Provinces in South East Turkey. Larval phenology is apparently similar to those of european species. Adults of *hakkariana* are rarely seen in flight preferably late afternoons of the spring months.

Centre for Entomological Studies Ankara



(A scientific Consortium)

(co-operation of research workers for pure-scientific, not commercial purpose)

Web Page of the Cesa: <http://www.cesa-tr.org/>

Scientific Serials: Priamus & Supplement (ISSN 1015-8243)ⁱ, Miscellaneous Papers (ISSN 1015-8235)ⁱⁱ, Memoirs (ISSN-8227)ⁱⁱⁱ, DVD Films^{iv}, Iconographia Insectorum^v, Cesa Publications on African Lepidoptera (series)^{vi}, Cesa News [online]^{vii}, Cesa Books^{viii}

Owners / Sahipleri - Editors / Yayıncılar: Prof. Dr. Ahmet Ömer Koçak (c/o Yüzüncü Yıl University, Turkey) - Editor Assistant: Asst. Prof. Dr. Muhabbet Kemal Koçak (c/o Yüzüncü Yıl University, Turkey).

Editorial Board of all Scientific Serials / Bütün Bilimsel Yayınların Yayın Kurulu: Insecta, taxonomy, nomenclature, ecology, faunistics: Prof. Dr. Ahmet Ömer Koçak (Yüzüncü Yıl Üniversitesi, Turkey), Asst. Prof. Dr. Muhabbet Kemal Koçak (Yüzüncü Yıl University, Turkey), Assoc. Prof. Dr. Selma Seven (Gazi University, Turkey), General Entomology: Assoc. Prof. Dr. Paitoon Leksawasdi (Chiang Mai University, Faculty of Science, Thailand); Homoptera: Dr. Emine Demir (Turkey). Orthoptera: Dr. Piotr Naskrecki (Connecticut University, U.S.A.), Assoc. Prof. Dr. Mustafa Ünal (Abant İzzet Baysal University, Turkey), Asst. Prof. Dr. Yusuf Hüseyinoğlu (Mersin University, Turkey), Asst. Prof. Dr. Yaşar Gülmez (Gazi Osman Paşa University, Tokat). Coleoptera / Chrysomelidae: Assoc. Prof. M.S.Mohammedsaid (Malaysia). - Plant taxonomy, flora and vegetation: Prof. Dr. Lütfi Behçet, Asst. Prof. Dr. Fevzi Özgökçe, Asst. Prof. Dr. Mural Ünal (Yüzüncü Yıl University, Van, Turkey).

ALL RIGHTS RESERVED

Correspondences should be addressed to: Prof. Dr. Ahmet Ömer Koçak,
c/o Yüzüncü Yıl University, Faculty of Science, Department of Biology, Campus, 65080Van / Turkey.
e-mail: cesa_tr@yahoo.com.tr

All serials are recorded regularly by the Zoological Record,
Thomson Reuters, Enterprise House, Innovation Way, Heslington, York, YO10 5NY, United Kingdom
ts-emea-york.dcsadmins@thomson.com

ⁱ <http://www.cesa-tr.org/Pri.htm> - pdf available after corresponding

ⁱⁱ <http://www.cesa-tr.org/Miscell.htm> - pdf available after corresponding

ⁱⁱⁱ <http://www.cesa-tr.org/Memoirs.htm> -

^{iv} <http://www.cesa-tr.org/CDF.htm>

^v <http://www.cesa-tr.org/Icon.htm>

^{vi} http://www.metafro.be/Members/Cesa/internet_sayfas305/base_view - pdf available

^{vii} <http://www.cesa-tr.org/Cesanews.htm>

^{viii} <http://www.cesa-tr.org/Cesabooks.htm>